



FINAL PROGRAM ENVIRONMENTAL IMPACT REPORT

Project No. 416603
SCH No. 2015021053

SUBJECT: CLIMATE ACTION PLAN: CITY COUNCIL APPROVAL for the adoption of the Climate Action Plan (CAP) and associated policies. Former Governor Arnold Schwarzenegger's Executive Order S-3-05 established the 2050 statewide greenhouse gas (GHG) reduction target of 80 percent below 1990 levels. In 2015, Governor Edmund G. Brown, Jr.'s Executive Order B-30-15 established the 2030 statewide GHG reduction target of 40 percent below 1990 levels. The City of San Diego has prepared a draft CAP that identifies measures to effectively meet GHG reduction targets for 2020, 2030, and 2035, as targets and interim targets for achieving the 2030 and 2050 State targets. The CAP estimates the GHG emissions for the City of San Diego in the baseline year 2010 (baseline) to be around 13.0 million metric tons of carbon dioxide equivalent (MMT CO₂e). The CAP estimates the City's emissions would increase to approximately 14.1 MMT CO₂e by 2020, 15.97 MMT CO₂e by 2030, and 16.74 MMT CO₂e by 2035. With implementation of the CAP, the City aims to reduce emissions 15 percent below the baseline to approximately 11.04 MMT CO₂e by 2020, 40 percent below the baseline to approximately 7.8 MMT CO₂e by 2030, and 50 percent below the baseline to approximately 6.5 MMT CO₂e by 2035. With implementation of the CAP, it is anticipated that the City would exceed its reduction target by 1.23 MMT CO₂e in 2020, ~~176,528~~ 211,196 metric tons (MT) CO₂e in 2030, and ~~127,135~~ 205,462 MT CO₂e in 2035. The CAP relies on significant City and regional actions, continued implementation of federal and state mandates, and five local strategies with associated action steps for target attainment. The five strategy areas are:

- Water & Energy Efficient Buildings;
- Clean & Renewable Energy;
- Bicycling, Walking, Transit & Land Use;
- Zero Waste (Gas & Waste Management); and
- Climate Resiliency.

Implementation of the CAP is divided into:

- Early Actions (Adoption of the CAP-December 31, 2017),
- Mid-Term Actions (January 1, 2018-December 31, 2020), and
- Longer-Term Actions (2021-2035).

~~Through 2020,~~ It is anticipated that with future implementing actions, the CAP would meet the requirements set forth in CEQA Guidelines Section 15183.5, whereby a lead agency (e.g. the City of San Diego) may analyze and mitigate the significant effects of GHG emissions at a programmatic level, such as in a general plan, a long range development plan,

or a separate plan to reduce GHG emissions. ~~Following adoption of the CAP, eligible individual projects preparing project specific environmental documents may tier from and/or incorporate by reference the CAP's programmatic review of GHG impacts in their cumulative impacts analysis.~~

APPLICANT: City of San Diego – Planning Department

Update 12/18/2014:

Minor revisions have been made to the Final Program Environmental Impact Report (PEIR) which are shown in a strikeout and underlined format. In accordance with California Environmental Quality Act (CEQA) Section 15073.5 (c)(4), the addition of new information that clarifies, amplifies, or makes insignificant modification does not require recirculation as there are no new impacts and no new mitigation identified. An environmental document need only be recirculated when there is identification of new significant environmental impact or the addition of a new mitigation measure required to avoid a significant environmental impact.

CONCLUSIONS:

Based on the analysis conducted for the project described above, the City has prepared the following Program Environmental Impact Report (PEIR) in accordance with the California Environmental Quality Act (CEQA) to inform public agency decision-makers and the public of the significant environmental effects that could result if the project is approved and implemented, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project (State CEQA Guidelines Section 15121). As further described in the attached PEIR, the City has determined that the project would have a significant environmental effect in the following areas(s): **Land Use, Visual Effects and Neighborhood Character, Air Quality, Greenhouse Gases, Historical Resources, Transportation and Circulation, Utilities, and Water Supply.**

For impacts related to **Visual Effects and Neighborhood Character, Air Quality, Historical Resources, and Transportation and Circulation**, mitigation measures (Chapter 11) would not reduce program-level impacts to below a level of significance. The attached PEIR documents the reasons to support the above determination.

MITIGATION, MONITORING AND PROGRAM:

A series of mitigation measures are identified within each issue area discussion in the PEIR to reduce environmental impacts. The mitigation measures are also fully contained in Chapter 11, Mitigation Monitoring and Reporting Program, of the PEIR.

RECOMMENDED ALTERNATIVES FOR REDUCING SIGNIFICANT UNMITIGATED IMPACTS:

Based on the requirement that alternatives reduce significant impacts associated with the proposed project, the PEIR considers the following Project Alternatives which are further detailed in the Executive Summary and Chapter 8 of the PEIR:

1. No Project (Adopted General Plan)
2. Climate Mitigation and Adaptation Plan (CMAP)


Under CEQA Guideline Section 15126.6(e)(2), if the No Project Alternative is the environmentally superior alternative, the EIR must also identify which of the other alternatives is environmentally superior. The PEIR identified the ~~proposed CAP~~ CMAP as the environmentally superior alternative because ~~both the No Project Alternative and the CMA~~P Alternative would have ~~greater~~ fewer impacts related to ~~GHGs~~ Land Use, Visual Effects and Neighborhood Character, and Air Quality than the proposed CAP.

PUBLIC REVIEW DISTRIBUTION:

Individuals, organizations, and agencies that received a copy or notice of the Draft PEIR and were invited to comment on its accuracy and sufficiency is provided below. Copies of the Draft PEIR may be reviewed in the office of the Planning Department, or purchased for the cost of reproduction.

RESULTS OF PUBLIC REVIEW:

- () No comments were received during the public input period.
- () Comments were received but did not address the accuracy or completeness of the Draft Environmental Impact Report (EIR). No response is necessary and the letters are attached at the end of the EIR.
- (X) Comments addressing the accuracy or completeness of the Draft Environmental Impact Report (EIR) were received during the public input period. The letters and responses are located immediately after the EIR Distribution List.


Jeff Murphy, Director
Planning Department

July 31, 2015
Date of Draft Report

November 23, 2015
Date of Final Report

Analyst: Rebecca Malone

DISTRIBUTION OF DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT:

Copies of the Draft PEIR were distributed to the following individuals, organizations, and agencies:

DISTRIBUTION:

Federal Government

US Environmental Protection Agency (19)
US Fish and Wildlife Service (23)

State of California

Caltrans, District 11 (31)
California Department of Fish and Wildlife (32)
California Natural Resources Agency (43)
Regional Water Quality Control Board: Region 9 (44)
Department of Water Resources (45)
State Clearinghouse (46)
California Coastal Commission (48)
State Water Resources Control Board (55)
Native American Heritage Commission (56)
Office of Planning and Research (57)

County of San Diego

Air Pollution Control District (65)
Department of Planning and Land Use (68)
County Water Authority (73)
Department of Environmental Health (75)

City of San Diego

Mayor's Office (91)
Council President Lightner, District 1
Councilmember Zapf, District 2
Councilmember Gloria, District 3
Councilmember Cole, District 4
Councilmember Kersey, District 5
Councilmember Cate, District 6
Councilmember Sherman, District 7
Councilmember Alvarez, District 8
Council President Pro Tem Emerald, District 9
City Attorney's Office (MS 59)

Amanda Guy
Heather Stroud
Heidi Vonblum

Planning Department
Tom Tomlinson, Interim Director
Nancy Bragado, Deputy Director
Brian Schoenfisch, Program Manager
Rebecca Malone, Associate Environmental Planner

Kurtis Steinert, Senior Environmental Planner
Myra Herrmann, Senior Environmental Planner
Seth Litchney, Senior Planner
Kelley Stanco, Senior Planner—Historical Resources
Jeff Harkness, Park Designer
Susan Morrison, Associate Environmental Planner
Jenny An, Urban Designer
Cathy Winterrowd, Former Deputy Director

Development Services Department
Kerry Santoro, Deputy Director
Martha Blake, Senior Planner
Anna McPherson, Senior Planner
Elizabeth Shearer-Nguyen, Senior Planner
Jeff Szymanski, Senior Planner

Public Utilities Department
Nicole McGinnis
Keli Balo

Public Works Department
Carrie Purcell

Environmental Services Department
Lisa Wood

Transportation and Storm Water Department
Mark Stephens

Park and Recreation Department
Kim Roeland

Libraries
Library Department—Gov. Documents (81)
Central Library (81A)
Balboa Branch (81B)
Beckwourth Branch (81C)
Benjamin Branch (81D)
Carmel Mountain Ranch Branch (81E)
Carmel Valley Ranch Branch (81F)
City Heights/Weingart Branch (81G)
Clairemont Branch (81H)
College-Rolando Branch (81I)
Kensington-Normal Heights Branch (81K)
La Jolla/Riford Branch (81L)
Linda Vista Branch (81M)
Logan Heights Branch (81N)
Malcolm X Library and Performing Arts Center (81O)
Mira Mesa Branch (81P)
Mission Hills Branch (81Q)
Mission Valley Branch (81R)
North Clairemont Branch (81S)
North Park Branch (81T)
Oak Park Branch (81U)
Ocean Beach Branch (81V)

Otay Mesa-Nestor Branch (81W)
Pacific Beach/Taylor Branch (81X)
Paradise Hills Branch (81Y)
Point Loma/Hervey Branch (81Z)
Rancho Bernardo Branch (81AA)
Rancho Penasquitos Branch (81BB)
San Carlos Branch (81DD)
San Ysidro Branch (81EE)
Scripps Miramar Ranch Branch (81FF)
Serra Mesa Branch (81GG)
Skyline Hills Branch (81HH)
Tierrasanta Branch (81II)
University Community Branch (81JJ)
North University Branch (81JJJ)
University Heights Branch (81K)
Malcolm A Love Library (457)

Other Governments

City of Chula Vista (94)
City of Coronado (95)
City of Del Mar (96)
City of El Cajon (97)
City of Escondido (98)
City of Imperial Beach (99)
City of La Mesa (100)
City of Lemon Grove (101)
City of National City (102)
City of Poway (103)
City of Santee (104)
City of Solana Beach (105)
San Diego Association of Governments (108)
San Diego Unified Port District (109)
San Diego County Regional Airport Authority (110)
Metropolitan Transit System (112/115)
San Diego Gas & Electric (114)
San Dieguito River Park JPA (116)

Other Interested Agencies, Organizations, and Individuals

Community Groups, Associations, Boards, and Committees

Community Planning Committee (194)
Balboa Park Committee (226 and 226A)
Black Mountain Ranch-Subara I (226C)
Otay Mesa-Nestor Planning Committee (228)
Otay Mesa Planning Committee (235)
Clairemont Mesa Planning Committee (248)
Greater Golden Hill Planning Committee (259)
Serra Mesa Planning Committee (263A)
Kearney Mesa Community Planning Group (265)

Linda Vista Community Planning Committee (267)
 La Jolla Community Planning Association (275)
 City Heights Area Planning Committee (287)
 Kensington-Talmadge Planning Committee (290)
 Normal Heights Community Planning Committee (291)
 Eastern Area Planning Committee (302)
 North Bay Community Planning Committee (307)
 Mira Mesa Community Planning Committee (310)
 Mission Beach Precise Planning Board (325)
 Navajo Community Planners, Inc. (336)
 Carmel Valley Community Planning Board (350)
 Del Mar Mesa Community Planning Board (361)
 North Park Planning Committee (363)
 Ocean Beach Planning Board (367)
 Old Town Community Planning Board (368)
 Pacific Beach Community Planning Committee (375)
 Pacific Highlands Ranch-Subarea III (377A)
 Rancho Penasquitos Planning Board (380)
 Peninsula Community Planning Board (390)
 Rancho Bernardo Community Planning Board (400)
 Sabre Springs Community Planning Group (406B)
 San Pasqual-Lake Hodges Planning Group (426)
 San Ysidro Planning and Development Group (433)
 Scripps Miramar Ranch Planning Group (437)
 Miramar Ranch North Planning Committee (439)
 Skyline Paradise Hills Planning Committee (443)
 Torrey Hills Community Planning Board (444A)
 Southeastern San Diego Planning Committee (449)
 Encanto Neighborhoods Community Planning Group (449A)
 College Area Community Planning Board (456)
 Tierrasanta Community Council (462)
 Torrey Highlands – Subarea IV (467)
 Torrey Pines Community Planning Board (469)
 University City Community Planning Group (480)
 Uptown Planners (498)

Town/Community Councils

Town Council Presidents Association (197)
 Barrio Station, Inc. (241)
 Downtown Community Council (243)
 Harborview Community Council (245)
 Clairemont Town Council (257)
 Serra Mesa Community Council (264)
 La Jolla Town Council (273)
 Rolando Community Council (288)
 Oak Park Community Council (298)
 Darnell Community Council (306)
 Mission Beach Town Council (326)
 Mission Valley Community Council (328C)

San Carlos Area Council (338)
 Carmel Mountain Ranch Community Council (344)
 Ocean Beach Town Council, Inc. (367A)
 Pacific Beach Town Council (374)
 Rancho Penasquitos Town Council (383)
 Rancho Bernardo Community Council, Inc. (398)
 San Dieguito Planning Group (412)
 United Border Community Town Council (434)
 Tierrasanta Community Council (462)
 Murphy Canyon Community Council (463)
 City of San Diego Sustainable Energy Advisory Board
 The Beach and Bay Beacon News (137)
 San Diego Chamber of Commerce (157)
 Building Industry Association (158)
 San Diego River Park Foundation (163)
 San Diego River Coalition (164)
 Sierra Club (165)
 San Diego Canyonlands (165A)
 San Diego Natural History Museum (166)
 San Diego Audubon Society (167)
 Jim Peugh (167A)
 San Diego River Conservancy (168)
 Environmental Health Coalition (169)
 Citizens Coordinate for Century 3 (179)
 Endangered Habitats League (182 & 182A)
 San Diego Tracking Team (187)
 League of Women Voters (192)
 National City Chamber of Commerce (200)
 Carmen Lucas (206)
 South Coastal Information Center (210)
 San Diego Historical Society (211)
 San Diego Archaeological Center (212)
 Save Our Heritage Organization (214)
 Ron Chrisman (215)
 Clint Linton (215B)
 Frank Brown - Inter-Tribal Cultural Resource Council (216)
 Campo Band of Mission Indians (217)
 San Diego County Archaeological Society Inc. (218)
 Kuumeyaay Cultural Heritage Preservation (223)
 Kuumeyaay Cultural Repatriation Committee (225)
 Native American Distribution
 Barona Group of Capitan Grande Band of Mission Indians (225A)
 Campo Band of Mission Indians (225B)
 Ewiiapaayp Band of Mission Indians (225C)
 Inaja Band of Mission Indians (225D)
 Jamul Indian Village (225E)
 La Posta Band of Mission Indians (225F)
 Manzanita Band of Mission Indians (225G)

Sycuan Band of Mission Indians (225H)
Viejas Group of Capitan Grande Band of Mission Indians (225I)
Mesa Grande Band of Mission Indians (225J)
San Pasqual Band of Mission Indians (225K)
Ipai Nation of Santa Ysabel (225L)
La Jolla Band of Mission Indians (225M)
Pala Band of Mission Indians (225N)
Pauma Band of Mission Indians (225O)
Pechanga Band of Mission Indians (225P)
Rincon Band of Luiseno Indians (225Q)
San Luis Rey Band of Luiseno Indians (225R)
Los Coyotes Band of Mission Indians (225S)

San Diego Apartment Association
Building Owners and Managers Association
San Diego Association of Realtors
Industrial Environmental Association
NAIOP San Diego
Urban Land Institute
American Institute of Architects, San Diego Chapter
Coastal and Estuarine Research Federation
The Nature Conservancy
Walk San Diego
Bike San Diego
American Lung Association
Community Forest Advisory Board
Green Edge Technology
San Diego 350
Diane Coombs
Landry Watson
Nicole Capretz
Nicola Hedge
Doug Smith
Bill Powers
Elyse Lowe
Angie Mei
Dr. D. Bart Chadwick
Joan Raphael
Masada Disenhouse
Angela Deegan
Grace Van Thillo
Janina Moretti
Philip Petrie
Lyla Fadali
Mike Bullock
Kath Rogers
Chandra Slaven
Monique Lopez
Melanie Tylke
Jean Costa

Joe LaCava
Kayla Race
Micah Mitrosky
Nick Ervin
Rena Marrocco
Colleen DieTzel
Sylvia Ollinger
Rodrigo De La Rosa
Rosario Garcia
Luz Palomino
Raymond Paulson
Phil Petrie
Louise Russell
Angela Deegan
Kimberly McGinley
Douglas Kot
Mary Lou Finley
Kathy Smith
Carolina Martinez
Gina Schumacher
Masada Disenhouse
Patricia Gracian
Huge Moore
Bob Silvern
Ashley Manzanec
Sam Ballard
Richard Hoverstock
Janina Moretti
Tasha Zogo
Ken Brucker
Michael Brackney
Jack Shu
Susan Randerson
Roddy Jerome
Adriana Covarrubias
Norma Norega
Joy Williams
Gaby Schubert
James Lawson
Craig Benedetto

RESPONSE TO COMMENTS ON THE DRAFT EIR

The Draft Environmental Impact Report (Draft EIR) for the Climate Action Plan was distributed for public review on July 31, 2015, initiating a 60-day public review period ending on September 29, 2015. The document was made available online, at 37 public libraries throughout the City of San Diego, and at the City of San Diego’s Planning Department. During the public review period, a total of 36 letters and emails were received before the close of the public comment period. Pursuant to California Environmental Quality Act (CEQA) Guidelines §15088(a), “the lead agency shall evaluate comments on environmental issues received from persons who reviewed the Draft EIR and shall prepare a written response.” All comment letters received on the Climate Action Plan Draft EIR were evaluated for environmental issues, and written responses to comments on the environmental issues were prepared.

Table 1 provides a list of the comment letters received, including details on the agency, organization, or individual that submitted the letter and the date of the letter. For organizational purposes, each letter has been assigned a letter identification as outlined in Table 1. Each comment letter is reproduced in its entirety and is aligned side-by-side with the response(s) to the letter. Where a commenter has provided multiple comments, each comment is indicated by a line bracket and an identifying number in the margin of the comment letter.

TABLE 1
LIST OF COMMENT LETTERS ON THE CLIMATE ACTION PLAN DRAFT PROGRAM EIR

Letter No.	Agency/Organization/Individual	Letter Date	Page No.
A	State Clearinghouse	NA	RTC-1
B	Art Harrison	Aug. 4, 2015	RTC-3
C	WaterSmart Software	Aug. 4, 2015	RTC-4
D	Thomas J. Sun	Aug. 6, 2015	RTC-6
E	Jim Bell	Aug. 9, 2015	RTC-7
F	Caltrans	Aug. 27, 2015	RTC-8
G	Ellen McCann	Sep. 9, 2015	RTC-10
H	California Department of Fish and Wildlife	Sep. 14, 2015	RTC-11
I	Elaine and Howard Maltz	Sep. 15, 2015	RTC-13
J	Peninsula Community Planning Board	Sep. 17, 2015	RTC-14
K	Center for Sustainable Energy	Sep. 22, 2015	RTC-18
L	Community Energy Action Network	Sep. 24, 2015	RTC-21
M	Donna Shanske	Sep. 27, 2015	RTC-25
N	Bill Tippets	Sep. 28, 2015	RTC-26
O	Green Cities California	Sep. 28, 2015	RTC-37
P	San Diego Unified Council of PTAs	Sep. 28, 2015	RTC-38
Q	San Diego 350	Sep. 28, 2015	RTC-39
R	SolarCity	Sep. 28, 2015	RTC-41
S	Sustainable Energy Advisory Board	Sep. 28, 2015	RTC-43
T	Erika Morgan	Sep. 28, 2015	RTC-47
U	Environmental and Economic Sustainability Task Force	Sep. 28, 2015	RTC-49
V	Dorothy Gesick	Sep. 29, 2015	RTC-53
W	Catheryn Mullinger	Sep. 29, 2015	RTC-54
X	William F. Avrin	Sep. 29, 2015	RTC-55
Y	Climate Action Campaign	Sep. 29, 2015	RTC-56
Z	Carlos F. Cabezud	Sep. 29, 2015	RTC-60
AA	San Diego Gas and Electric	Sep. 29, 2015	RTC-61
AB	Colleen Dietzel	Sep. 29, 2015	RTC-70
AC	Building Industry Association	Sep. 29, 2015	RTC-71
AD	Environmental Health Coalition	Sep. 29, 2015	RTC-75
AE	Boulevard Planning Group	Sep. 29, 2015	RTC-98
AF	CERF	Sep. 29, 2015	RTC-113
AG	Sierra Club of San Diego	Sep. 29, 2015	RTC-118
AH	Community Forest Advisory Board	Sep. 29, 2015	RTC-140
AI	Circulate San Diego	Sep. 29, 2015	RTC-146
AJ	Rancho Bernardo Community Planning Board	Sep. 17, 2015	RTC-149

LETTER

RESPONSE

Comment Letter A

Response to Comment Letter A

Comment noted.

EDMUND G. BROWN JR.
GOVERNORSTATE OF CALIFORNIA
GOVERNOR'S OFFICE of PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNITKEN ALEX
DIRECTOR

September 15, 2015

Rebecca Malone
City of San Diego
1222 First Avenue, MS-501
San Diego, CA 92101Subject: Climate Action Plan
SCH#: 2015021053

Dear Rebecca Malone:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on September 14, 2015, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Director, State ClearinghouseEnclosures
cc: Resources Agency1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.oprc.ca.gov

Comment Letter A

Document Details Report
State Clearinghouse Data Base

SCH#	2015021053		
Project Title	Climate Action Plan		
Lead Agency	San Diego, City of		
<hr/>			
Type	EIR Draft EIR		
Description	The CAP has been developed in response to State legislation and policies that are aimed at reducing CA's GHGE. This includes EO S-3-05, which established the 2050 statewide GHG reduction target of 80 percent below 1990 levels, EO B-30-15, which established the 2030 statewide GHG reduction target of 40 percent below 1990 levels, and AB 32, the Global Warming Solutions Act, which tasked the California Air Resources Board with creating the Climate Change Scoping Plan (Scoping Plan) to establish a 2020 interim target and to provide a path for local governments to contribute their fair share of the GHGE reductions necessary to achieve the target.		
<hr/>			
Lead Agency Contact			
Name	Rebecca Malone		
Agency	City of San Diego		
Phone	61-446-5371	Fax	
email			
Address	1222 First Avenue, MS-501		
City	San Diego	State	CA Zip 92101
<hr/>			
Project Location			
County	San Diego		
City			
Region			
Lat / Long			
Cross Streets	Citywide		
Parcel No.			
Township	Range	Section	Base
<hr/>			
Proximity to:			
Highways	I-5,I-15,I-805,SR-52,SR-94,SR905		
Airports	Lindbergh Field, Miramar		
Railways	San Diego Trolley		
Waterways	Pacific Ocean, San Diego Bay, Mission Bay, San Diego River, Lake Murray, San Vicente Reservoir,		
Schools	Multiple		
Land Use	Various Land Uses, zoning and GP designations intersect with the program elements.		
<hr/>			
Project Issues	Air Quality; Archaeologic-Historic; Solid Waste; Traffic/Circulation; Water Supply; Growth Inducing; Landuse; Cumulative Effects; Other Issues		
<hr/>			
Reviewing Agencies	Resources Agency; California Coastal Commission; Department of Fish and Wildlife, Region 5; Department of Parks and Recreation; Department of Water Resources; Caltrans, Division of Aeronautics; Cal Fire; Caltrans, District 11; Air Resources Board, Transportation Projects; Air Resources Board, Major Industrial Projects; Regional Water Quality Control Board, Region 9; California Energy Commission; Native American Heritage Commission; Public Utilities Commission		
<hr/>			
Date Received	07/31/2015	Start of Review	07/31/2015 End of Review 09/14/2015

Note: Blanks in data fields result from insufficient information provided by lead agency.

LETTER

RESPONSE

Comment Letter B

From: [Art Harrison](#)
To: [DSD EAS](#)
Subject: Draft CAP
Date: Tuesday, August 04, 2015 10:23:09 AM

Ms. Malone,

Thank you for sending me the draft plan. As I read through, I found very little but vague promises and nods to the various "stakeholders". Some of these (urban forest and bike trails) might increase greenhouse gases by the inefficiencies they introduce.

As a "real person" not a stakeholder/special interest group, some things I would like to see are;

Reduction in traffic calming. This reduces inefficiencies.

Intelligent traffic grid (timing by computer of lights). This also reduces inefficiencies.

Road repair. This reduces costs in auto repairs to all San Diego citizens regardless of income but advantages older vehicles operated by lower income.

These are three ideas of the top of my head (no they are from President Carter's 1975 energy independence program). I am a retired grocery clerk.

My question to you, why is the city's program just seem to be the usual handouts to the special interest groups.

By the way, how much did this feel good draft plan cost between the consultants and the city's planning department? The answer to this question is the reason for my scepticism.

Sincerely,

Capt. Art Harrison (former member of the NHPG)

B-1

B-2

B-3

Response to Comment B-1

Comment noted. CAP strategies are identified in CAP Chapter 3, and the environmental impacts of implementation of those strategies are discussed in Draft EIR Chapter 3. CAP Chapter 3 also establishes a monitoring and reporting mechanism to ensure successful implementation of the CAP.

Response to Comment B-2

Comment noted.

The CAP has been developed in response to State legislation and policies that are aimed at reducing California's greenhouse gas (GHG) emissions. This includes Executive Order S-3-05, which established the 2050 statewide GHG reduction target of 80 percent below 1990 levels, Executive Order B-30-15, which established the 2030 statewide GHG reduction target of 40 percent below 1990 levels, and Assembly Bill 32, the Global Warming Solutions Act, which tasked the California Air Resources Board (CARB) with creating the Climate Change Scoping Plan (Scoping Plan) to establish a 2020 interim target and to provide a path for local governments to contribute their fair share of the GHG emission reductions necessary to achieve the target.

The CAP was developed to achieve the statewide mandates and was developed to serve the interests of all residents in the City of San Diego.

Response to Comment B-3

Comment noted. This comment does not address the adequacy of the Draft EIR.

LETTER

RESPONSE

Comment Letter C



20 California Street, Suite 200
San Francisco, CA 94111

415.366.8622
WaterSmart.com

Rebecca Malone, Associate Planner
City of San Diego Planning Department
1222 First Avenue, MS 501
San Diego, CA 92101

August 4, 2015

Dear Ms. Malone,

Thank you for the opportunity to comment on San Diego's July 2015 Draft Climate Action Plan. The Plan will do much to reduce greenhouse gas emissions in the City and create a sustainable future for San Diego. In particular, WaterSmart Software applauds the City's attention to the water-energy nexus, recognizing that reducing water consumption can reduce energy use and the associated greenhouse gas emissions. We recommend including the deployment of water-use monitoring software as a strategy for reducing water and energy consumption.

As the Plan notes, there is a robust nexus between water, energy, and greenhouse gas emissions. About 20% of California's total electricity use and 30% of the natural gas use (not related to power production) goes toward moving, heating, and treating water around the state.¹ In order to reduce greenhouse gas emissions in this sector, the Plan highlights the importance of energy and water efficient buildings and puts forth methods by which to "reduce daily per capita water consumption."

Water-use monitoring software technology is an example of a proven, cost-effective water efficiency and conservation tool that can reduce water demand and related greenhouse gas emissions. Water-use monitoring software, using social norm comparisons, allows water utilities to better educate their customers about how much water they use, how their water use compares to that of others, and what personalized actions can best save water, energy, and money.

Increasing public education and awareness with more precise and comparative information on water-use through deploying monitoring software has been proven by independent evaluations to reduce water demand by 4.6% to 6.6% within the first 6 to 12 months.² In addition, customers participating in the project and

¹ <http://www.energy.ca.gov/research/iaw/water.html>

² California Water Foundation, 2013

[http://californiawaterfoundation.org/uploads/1389391749-Watersmart_evaluation_report_FINAL_12-12-13\(00238356\).pdf](http://californiawaterfoundation.org/uploads/1389391749-Watersmart_evaluation_report_FINAL_12-12-13(00238356).pdf)

C-1

Response to Comment C-1

Comment noted. This comment does not address the adequacy of the Draft EIR.

Comment Letter C

receiving social-norms based messaging are between two and six times as likely to participate in water conservation programs offered by the utility, such as appliance rebates, on-site water evaluations, and landscape conversions, further reducing demand for water and energy and providing additional GHG emission reductions.

A half-dozen providers, partnering with over 40 water suppliers across the state, currently offer water-use monitoring software. The Governor's Executive Order B-29-15, implementing the Water Energy Technology (WET) Program, recognizes that investment in new technologies, including "water-use monitoring software," is necessary to reduce statewide water and energy use and related greenhouse gas emissions.

The Plan already includes a "Smart Energy Management and Monitoring System" as one measure to track energy consumption and reduce demand. Water-use monitoring software can similarly provide important greenhouse gas emission reductions through water and related energy savings.

Thank you again for the opportunity to comment on this valuable plan to reduce greenhouse gas emissions in San Diego. Please let us know if there is any other information we can provide.

Sincerely,



Peter Yolles
Founder
WaterSmart Software

C-1

LETTER

RESPONSE

Comment Letter D

From: [Thomas Sun](#)
To: [DSD EAS](#)
Subject: San Diego Draft Climate Action Plan: Student Feedback
Date: Thursday, August 06, 2015 4:20:26 PM

Good Afternoon Rebecca Malone,

My name is Tom and I am an undergraduate student at UCSD. I had some feedback about the draft SD CAP that I hope you can take into consideration for its next stages.

Water:

Most of the discussion of SD's water plans revolved around supporting state and federal initiatives. As one of the driest, large cities in SoCal, we need to be leaders on this issue, rather than followers. The implementation of Potable Reuse (Direct and Indirect) should be part of our plan to wean off our dependence on energy costly imported water.

Transportation:

There is not enough emphasis on the SD Trolley. As a long time resident of Los Angeles, I was greatly disappointed in the state of SD's light rail system. Considering SD's hilly topography, the Trolley should be invested as its top priority in transportation plans.

City Planning:

Smart Growth planning must be institutionalized into the city's long term growth plan. SD cannot continue to grow sparsely. This has been proven to be an incorrect city planning policy and must be replaced with Smart Growth ASAP.

Please let me know if any of my recommendations comes into talks for the next phase of the CAP draft.

Thank you,
Tom

Thomas J. Sun

University of California, San Diego
Jacobs School of Engineering
Candidate: B.S. Environmental Engineering '17
Cell: 626-379-6633 Fax: (213)928-9768

D-1

Response to Comment D-1

This comment does not address the adequacy of the Draft EIR. Comment noted. The CAP identifies five primary strategies implemented by 17 actions and 32 supporting measures to meet specified targets.

The primary strategies include actions that support City-wide water conservation efforts, multi-modes of transportation, and actions that promote the effective land uses needed to reduce vehicle miles traveled. The following CAP actions and strategies relating to water conservation, multimodal transportation and land use are briefly described below. Potential impacts associated with implementation of the CAP actions and strategies are addressed in the Draft EIR. In particular, please refer to Actions 1.3, 1.4, 1.5, and 3.1-3.6.

LETTER

RESPONSE

Comment Letter E

From: [Jim Bell](#)
To: [DSD EAS](#)
Subject: Sustainability
Date: Sunday, August 09, 2015 10:49:43 AM
Attachments: [C&K English doc.pdf](#)

Hi Rebecca,

I applaud the city's move toward a more sustainable economy, but if we want to lead the world in this endeavor, the attachment above shows the way. Titled "Consciousness & Knowledge," in 12 pages of text and graphics the paper lays out the minimum that those alive over the next 60 years need to accomplish and how to cost-effectively accomplish them – to improve contemporary life and to leave our descendants their best to live in a peaceful, prosperous and live-support sustaining future.

The plans focus is global, but it uses the San Diego/Tijuana Region to show how a particular region with its situation can become cost-effectively renewable energy, water and food self-sufficient. Please give it a good read. If you like it, please pass it along. FYI –The paper has already been translated into Spanish and Chinese an a Portuguese version is in the works. All the completed versions are free at jimbells.com, click on the "Consciousness & Knowledge" language heading.

All the best in your life and work,
Jim Bell, 619-758-9020

E-1

Response to Comment E-1

This comment does not address the adequacy of the Draft EIR. Comment noted.

LETTER

RESPONSE

Comment Letter F

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION

DISTRICT 11, DIVISION OF PLANNING
4050 TAYLOR ST, M.S. 240
SAN DIEGO, CA 92110
PHONE (619) 688-4960
FAX (619) 688-4299
TTY 711
www.dot.ca.gov



Serious drought.
Help save water!

August 27, 2015

11-SD-VAR
San Diego Climate Action Plan
Draft PEIR
SCH #2015021053

Mrs. Rebecca Malone
City of San Diego
1222 First Avenue, MS 501
San Diego, CA 92101

Dear Mrs. Malone:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the City of San Diego's (City) Draft Climate Action Plan (CAP). The mission of Caltrans is to provide a safe, sustainable, integrated, and efficient transportation system to enhance California's economy and livability. The Local Development-Intergovernmental Review (LD-IGR) Program reviews land use projects and plans to ensure consistency with our mission and state planning priorities of infill, conservation, and efficient development. To ensure a safe, efficient, and reliable transportation system, we encourage early consultation and coordination with local jurisdictions and project proponents on all development projects that utilize the multi-modal transportation network.

Caltrans has reviewed the Draft CAP and the CAP Draft Program Environmental Impact Report (PEIR) dated July 2015, and has the following comments:

Caltrans encourages the City to coordinate with the San Diego Association of Governments (SANDAG) and their Sustainable Communities Strategy (SCS) efforts, to address regional strategies to reduce greenhouse gases (GHG) and Vehicle Miles Travel (VMT). The Draft CAP's proposed actions coordinate with the GHG emission reduction efforts as outlined in the adopted SCS for the 2050 Regional Transportation Plan.

Caltrans commends the City for the CAP's proposed implementation of the City's existing Pedestrian Master Plan (Action 3.2) and Bicycle Master Plan (Action 3.3). Furthermore, Caltrans recommends coordination with the City on the proposed implementation of a future Traffic Signal Master Plan (Action 3.4) and a Roundabouts Master Plan (Action 3.5) for locations where a traffic signal retiming or roundabout installation may impact the State Highway System.

Caltrans recognizes that there is a strong link between transportation and land use. Development can have a significant impact on traffic and congestion on State transportation facilities. In particular, the pattern of land use can affect both total vehicle miles traveled and the number of

"Provide a safe, sustainable, integrated and efficient transportation system
to enhance California's economy and livability"

F-1

F-2

F-3

Response to Comment F-1

The 2050 RTP/SCS forecasts population and employment growth in the region and establishes a regional plan for future land use and transportation system improvements that would reduce GHG emissions from passenger vehicles and light trucks.

For the 2050 RTP/SCS, SANDAG staff worked directly with local jurisdictions, including the City of San Diego staff, to include land use and transportation data into the 2050 Regional Growth Forecast. The City will continue to coordinate with SANDAG and its Sustainable Communities Strategy efforts.

Response to Comment F-2

Comment noted.

Response to Comment F-3

The CAP includes actions and strategies (see CAP Action 3.1) that implement the General Plan's Mobility Element and the City of Villages strategy in Transit Priority Areas to increase the use of transit.

LETTER

RESPONSE

Comment Letter F

Mrs. Rebecca Malone
August 27, 2015
Page 2

trips. Caltrans strongly encourages local agencies to work towards a safe, functional, interconnected, multi-modal system.

↑
F-3

Caltrans appreciates the continued coordination with City staff on the CAP. If you have any questions, please contact Jose Marquez at (619) 688-3193.

Sincerely,



JACOB ARMSTRONG, Branch Chief
Development Review Branch

c: State Clearinghouse

*"Provide a safe, sustainable, integrated and efficient transportation system
to enhance California's economy and livability"*

LETTER

RESPONSE

Comment Letter G

From: Ellen
To: DSD, EAS
Cc: Mayor Kevin Faulconer; Councilmember Sherri Lichtner; CouncilMember Lorie Zapf; Councilmember Todd Gloria; Councilmember Myrtle Cole; Councilmember Mark Kersey; CouncilMember Chris Cate; Councilmember Scott Sherman; CouncilMember David Alvarez
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Wednesday, September 09, 2015 3:53:52 PM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

The Climate Action Plan should be strengthened to achieve:

- **Transportation justice:** Invest in transit, bicycling, and pedestrian infrastructure in our neighborhoods first, and put people and transit before freeways
- **Energy justice:** Put solar in our neighborhoods, give San Diegans a clean energy choice, and require buildings to be energy efficient
- **Jobs:** Create good-paying jobs for local residents
- **Climate change resilience:** Protect our natural resources, wildlife, coastline, infrastructure, and public health from the harmful impacts of climate change
- **Achieve bold goals and comply with local and state laws:** Meet or exceed the draft climate plan's goals to cut carbon in half, use alternative transit for half of commutes, use 100 percent clean energy, increase our urban forests and parks and reduce waste.

G-1

The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

Ellen

ellenmccann63@hotmail.com
 1262 Amalfi Pl.

Escondido, CA, 92027

Response to Comment G-1

The Draft EIR analyzes the environmental effects of implementation of the CAP.



State of California – Natural Resources Agency
 DEPARTMENT OF FISH AND WILDLIFE
 South Coast Region
 3883 Ruffin Road
 San Diego, CA 92123
 (858) 467-4201
 www.wildlife.ca.gov

Comment Letter H

EDMUND G. BROWN JR., Governor
 CHARLTON H. BONHAM, Director



September 14, 2015

Ms. Rebecca Malone
 City of San Diego
 1222 First Avenue, MS 501
 San Diego, CA 92101
 Email: DSDEAS@sandiego.gov

**Subject: Comments on the Draft Programmatic Environmental Impact Report,
 Climate Action Plan; City of San Diego, County of San Diego
 (SCH # 2015021053) Project Number 416603**

Dear Ms. Malone:

The California Department of Fish and Wildlife (Department) has reviewed the above-referenced Draft Programmatic Environmental Impact Report (DPEIR) prepared by the City of San Diego Planning Department (City) pursuant to the California Environmental Quality Act (CEQA). The Climate Action Plan (CAP) prepared by the City of San Diego (Proposed Project) would allow for the adoption of the CAP and associated policies to reduce Greenhouse Gas (GHG) emissions. The City participates in the NCCP program by implementing its approved Multiple Species Conservation Program (MSCP) Subarea Plan (SAP).

Former Governor Arnold Schwarzenegger's Executive Order S-3-05 established the 2050 statewide GHG reduction target of 80 percent below 1990 levels. Governor Edmund G. Brown Jr.'s 2015 Executive Order B-30-15 established the 2030 statewide GHG reduction target of 40 percent below 1990 levels. The City has developed the Proposed Project to identify measures to comply with GHG reduction targets and anticipates exceeding its' GHG emission reduction targets through implementation of the CAP. The CAP would be implemented through Early Actions (Beginning December 31, 2017), Mid-Term Actions (January 1, 2018 – December 31, 2020), and Longer-Term Actions (2021 – 2035). The CAP relies on City and regional actions, continued implementation of federal and state mandates, and five local strategies with associated action steps. The City has identified the following five strategy areas:

- Water Energy Efficient Buildings;
- Clean and Renewable Energy;
- Zero Waste (Gas and Waste Management); and,
- Climate Resiliency.

The following statements and comments have been prepared pursuant to the Department's authority as Trustee Agency with jurisdiction over natural resources affected by the project (CEQA Guidelines § 15386) and pursuant to our authority as a Responsible Agency under CEQA Guidelines section 15381 over those aspects of the proposed project that come under the purview of the California Endangered Species Act ([CESA] Fish and Game Code § 2050 *et seq.*) and Fish and Game Code section 1600 *et seq.* It is the policy of the Department to promote and foster the development of planning strategies at the ecosystem level through active participation in local development of regional Natural Community Conservation Plan (NCCPs), which often include innovative multiple species habitat conservation planning efforts (e.g., MSCP). The success of these plans is reliant on maintaining core biological resource

Conserving California's Wildlife Since 1870

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Comment Letter H

Ms. Rebecca Malone
City of San Diego
September 14, 2015
Page 2 of 2

areas and habitat linkages that are essential to the long-term biological viability of associated flora and fauna.

MSCP Consistency. As a component of the CAP's Strategy 2, *Clean Renewable Energy* the City would strive to achieve one hundred percent renewable energy supply to its electrical grid by the year 2035. The Department commends efforts to encourage sustainable green energy production, including the utilization of distributed-rooftop energy solutions because it co-locates energy production with existing development, thereby minimizing habitat loss associated with the physical footprint of the energy production itself.

H-1

According to the DPEIR (a Supporting Measure of Action 2.1), the CAP intends to "E[estab]lish policies, programs and ordinances that facilitate and promote siting of new onsite photovoltaic energy generation and energy storage systems". As stated above, the Department encourages renewable energy development which has been designed to minimize potential biological affects, particularly permissible land uses that minimize habitat disturbances. In addition, the Department recommends that the DPEIR include a discussion that demonstrates how the CAP is consistent with the City's MSCP Subarea Plan and Multi-Habitat Planning Area (MHPA). This should include demonstrating that the CAP would not adversely affect protections of the preserve system by directing development of renewable energy facilities within areas identified for preservation (Implementing Agreement, section 10.2 *et seq.*)¹. The Department recommends that the CAP is specific in promoting renewable energy installations outside of the MHPA as ancillary configurations coincident with the physical dimensions of existing structures. For example, we would anticipate that renewable energy installations would occur on existing structures as opposed to siting new renewable energy installations within native habitat or MHPA.

H-2

We appreciate the opportunity to comment on the DPEIR for this Proposed Project and to assist the City in further minimizing and mitigating project impacts to biological resources. The Department requests an opportunity to review and comment on any response that the City has to our comments and to receive notification of the forthcoming hearing date for the project (CEQA Guidelines; §15073(e)). If you have any questions or comments regarding this letter, please contact Eric Weiss, Senior Environmental Scientist (Specialist) at Eric.Weiss@wildlife.ca.gov or (858) 467-4289.

Sincerely,



Betty J. Courtney
Environmental Program Manager I
South Coast Region

cc: Erinn Wilson, CDFW, Los Alamitos
State Clearinghouse, Sacramento

¹ 1997 Implementing Agreement by and between United States Fish and Wildlife Service, California Department of Fish and Game, and City of San Diego to establish a multiple species conservation program ("MSCP") for the conservation of threatened, endangered, and other species in the vicinity of San Diego, California.

Response to Comment H-1

Comment noted.

Response to Comment H-2

Biological resources were addressed in Section 6.0 of the Draft EIR (Effects Found not to be Significant). This chapter discusses the environmental issue areas where impacts were found to not be significant. These discussions address the CEQA checklist questions and thresholds developed by the City of San Diego for each of the environmental topic areas. The discussion of the proposed CAP's consistency with the City's MSCP Subarea Plan and Multi-Habitat Planning Area (MHPA) (as discussed on Page 7-4 of the Draft EIR) are summarized below.

Action 2.1 of the CAP targets achievement of a 100 percent renewable supply of electricity by 2035 through consideration of a CCA or other program. While the CAP does not propose to construct any site-specific renewable energy infrastructure projects, this Action could result in the development of small-scale renewable energy systems (such as residential and commercial roof-top solar PV systems). This type of small-scale project would generally result in minimal environmental impacts. There is the potential, however, for development of renewable energy facilities in undeveloped areas and more sensitive areas, both within and outside the City limits. Within the City limits, any such development would be subject to the restrictions and requirements of the MSCP Subarea Plan, ESL ordinance, and the Biology Guidelines. Such projects would be required to comply with the MSCP Land Use Adjacency Guidelines, which require all projects to ensure that site drainage is not directed into MSCP lands, measures are incorporated to reduce potential for chemicals to enter the MHPA lands, lighting is directed away from MHPA lands and buffered by landscaping where possible, noises are minimized and excessive noise during the breeding season is curtailed, and barriers are constructed along new development to protect MHPA lands from the public. Any renewable energy project proposed to implement CAP Action 2.1 would be subject to the ESL Ordinance, Section 143.01 of the Land Development Code, which would reduce impacts to these areas. Therefore, conflicts or inconsistencies with these plans are not expected to occur within the City and are not expected to have a substantial adverse impact on any species identified as a candidate, sensitive or special status species.

LETTER

RESPONSE

Comment Letter I

From: [Elaine & Howard Maltz](#)
To: [DSD EAS](#)
Subject: Climate Action Plan for 2035
Date: Tuesday, September 15, 2015 1:19:40 PM

Attention: Rebecca Malone, Associate Planner City of San Diego

We are writing in regard to the Climate Action Plan for 2035:

- We support a **binding** goal to reduce our carbon footprint by half by 2035.
- We support using 100% clean energy.
- We support using **only** Community Choice Aggregation, a local entity, as a vehicle for ensuring the above.
- We support the increased implementation of public transportation. We would especially like to see the restoration of the bus route going up Nautilus Street in La Jolla. With several stops along the way, it could enable many to walk out to Nautilus, take a bus and transfer to another bus which could take them into downtown San Diego.

I-1

We are excited at the prospect that San Diego could be the first large city to accomplish all of this.

Respectfully,

Elaine Maltz

Howard Maltz, M.D.

6575 Manana Place
La Jolla, CA 92037

Response to Comment I-1

The Draft EIR analyzes the environmental effects of implementation of the CAP.

Comment Letter J

Peninsula Community Planning Board
P O Box 7994
San Diego, CA 92167
pcpbem@gmail.com

September 17, 2015

Ms. Rebecca Malone, Associate Planner
City of San Diego Planning Department
1222 First Avenue, MS 501
San Diego, CA 92101
Via email to: DSDEAS@sandiego.gov

Draft Program Environmental Impact Report for San Diego Climate Action Plan SCH NO. 2015021053
Project NO. 416603, COMMUNITY AREA PLAN: All Community Plan Areas COUNCIL DISTRICT: All Council Districts

The Peninsula Community Planning Board (PCPB) reviewed the Draft Program Environmental Impact Report (PEIR), dated July 2015, for City Council approval for the adoption of the Climate Action Plan (CAP) and associated policies, and appreciates the opportunity to provide comments.

COMMENTS

1. According to the Draft PEIR, the CAP was developed in response to State legislation and policies aimed at reducing California's greenhouse gas (GHG) emissions. Former Governor Arnold Schwarzenegger's Executive Order S-3-05 established the 2050 statewide greenhouse gas (GHG) reduction target of 80 percent below 1990 levels. In 2015, Governor Edmund G. Brown, Jr.'s Executive Order B-30-15 established the 2030 statewide GHG reduction target of 40 percent below 1990 levels. The CAP is intended to ensure the City of San Diego contributes its fair share of GHG reductions through local action, and identifies measures to meet GHG reduction targets for 2020 and 2035, and identifies five primary strategies implemented by 17 actions and 32 supporting measures, which together, are intended to meet GHG reduction targets for 2020, as well as an interim target set for 2035. The CAP serves as a framework for City GHG reduction strategies, and includes requirements for monitoring and periodic updates to ensure the City is achieving its GHG reductions targets.

The CAP estimates the GHG emissions for the City of San Diego in the baseline year 2010 (baseline) to be around 13.0 million metric tons of carbon dioxide equivalent (MMT CO₂e). The CAP estimates the City's emissions would increase to approximately 14.1 MMT CO₂e by 2020, 15.7 MMT CO₂e by 2030, and 16.4 MMT CO₂e by 2035. With implementation of the CAP, the City aims to reduce emissions 15 percent below the baseline to approximately 11.1 MMT CO₂e by 2020, 40 percent below the baseline to approximately 7.8 MMT CO₂e by 2030, and 50 percent below the baseline to approximately 6.5 MMT CO₂e by 2035. The Draft PEIR states that with implementation of the CAP, it is anticipated the City would exceed its reduction target by 1.3 MMT CO₂e in 2020, 176,528 metric tons (MT) CO₂e in 2030, and 127,135 MT CO₂e in 2035.

It is unclear from the analysis in the Draft PEIR whether the above reduction targets would meet the reduction targets based on 1990 levels, which is the mandate in the above noted Executive Orders.

J-1

Response to Comment J-1

The City of San Diego, when determining its GHG emission reductions from the CAP actions for 2020 and 2035, used a 2010 baseline as recommended by the California Air Resources Board. To make the long range projected emission reductions consistent and easy to understand, the City set its 2020 and 2035 reduction targets on a percentage reduction from that 2010 baseline.

Per the California Air Resources Board (CARB), 1990 statewide emission levels are estimated to be 431 MMTCO₂e (<http://www.arb.ca.gov/cc/inventory/1990level/1990level.htm>). CARB has also reported 2011 statewide emissions were found to be 429 MMTCO₂e (<http://www.arb.ca.gov/cc/reporting/ghg-rep/reported-data/2008-2012-ghg-summary-2013-11-04.pdf>), meaning emissions in the baseline year were likely at or near what they were in 1990.

Additionally, although the statewide GHG emissions were approximately the same in 2010 compared to 1990, the City population increased at a slower rate during that same time period (17.15%) than the state as a whole (24.96%) (https://www.census.gov/prod/2002pubs/00ccdb/cc00_tabC1.pdf; <http://quickfacts.census.gov/qfd/states/06/0666000.html>). Moreover, since 1990, Title 24 requirements for new construction were adopted, use of renewable energy increased, and fuel standards have become more strict. For these reasons, it was determined that the 2010 baseline was an appropriate baseline from which to measure the City's GHG emissions reductions.

Since CARB has not provided guidance on a specific reduction target for local governments to use for 2030 and 2050 and the City cannot acquire data to determine its exact 1990 emission levels, the 2010 baseline provides the most accurate description of the emission reductions that can be achieved by the proposed long-term CAP actions. If CARB provides new guidance on how cities should address the 2030 targets, the City will adjust the CAP accordingly. Page 3 of the Climate Action Plan has been amended to clarify the calculations used to determine the City's emission reduction targets.

Comment Letter J

PCPB Comments on Draft PEIR for City of San Diego CAP
September 17, 2015
Page 2

2. The Draft PEIR states implementation of the CAP Project would result in significant effects to: Land Use, Visual and Neighborhood Resources, Air Quality, Greenhouse Gases, Historical Resources, and Traffic and Circulation. Table ES-1 (page ES-1) of the Draft PEIR, states all impacts identified can be mitigated to a less-than-significant level, except the impact on Historical Resources. However, Draft PEIR pages ES-4 and ES-5 states after mitigation, the following impacts could remain significant and should be considered an unavoidable consequence of the project:

Issue B.1: Visual Effects and Neighborhood Character: Implementation of the CAP could affect the visual quality of the planning area, particularly with respect to views from public viewing areas, vistas, or open spaces.

Issue B.2: Visual Effects and Neighborhood Character: Implementation of the CAP could introduce incompatible uses with surrounding development in terms of bulk, scale, materials, or style that would result in adverse visual impacts. Executive Summary San Diego Climate Action Plan ES-4 ESA / 140651 Draft Program Environmental Impact Report July 2015

Issue C.2: Air Quality: Implementation of the CAP could result in air emissions that would substantially deteriorate ambient air quality, including the exposure of sensitive receptors to substantial pollutant concentrations.

Issue E.1: Historic Resources: Implementation of the CAP could cause a substantial adverse change in the significance of a historical resource, as defined in Section 15064.5, or have other physical or aesthetic effects to a prehistoric or historic building, structure, object or site.

Issue F.2: Transportation and Circulation: Implementation of the CAP could create substantial alterations to present circulation movements including effects on existing public access points and/or resulting from anticipated changes in transportation modes.

The Draft PEIR needs to clarify whether the above impacts remain significant (i.e., unmitigable) even with the incorporation of mitigation measures identified in the Draft PEIR.

3. The Draft PEIR states the CAP relies on City and regional actions, continued implementation of federal and state mandates, and five local strategies with associated action steps for target attainment. The five strategy areas are:
- Water & Energy Efficient Buildings;
 - Clean & Renewable Energy;
 - Bicycling, Walking, Transit & Land Use;
 - Zero Waste (Gas & Waste Management); and
 - Climate Resiliency.

J-2

J-3

Response to Comment J-2

The conclusions in the Draft EIR analyses in Chapter 3.B (Visual Effects on Neighborhood Character), Chapter 3.C (Air Quality), Chapter 3.E (Historical Resources), and Chapter 3.F (Transportation and Circulation) indicate that significant and unmitigable impacts would remain for these resources even with implementation of mitigation measures. Table E-1 accurately reflects the findings of significance for these resource issues. The text in the first paragraph under Executive Summary, Subsection I (Major Conclusions, Areas of Controversy, and Issues to be Resolved) has been revised to reflect the correct conclusions for these resource issues.

Response to Comment J-3

The Draft EIR concluded that implementation of the proposed CAP would result in significant impacts to the following resources issues: Land Use, Visual and Neighborhood Resources, Air Quality, Greenhouse Gases, Historical Resources, and Traffic and Circulation. All applicable mitigation measures identified in the Draft EIR include mitigation measures that are enforceable by the City. The CAP strategies that involve state and regional actions are not mitigation measures required by CEQA. Rather, they are actions that are included in CAP, which is the approval analyzed in the Draft EIR.

Comment Letter J

PCPB Comments on Draft PEIR for City of San Diego CAP
September 17, 2015
Page 3

Implementation of the CAP is divided into:

- Early Actions (Adoption of the CAP-December 31, 2017),
- Mid-Term Actions (January 1, 2018-December 31, 2020), and
- Longer-Term Actions (2021-2035).

The objectives of the CAP are to:

- Provide a roadmap to achieve GHG reductions;
- Conform to California laws and regulations;
- Implement climate action policies of the General Plan;
- Provide CEQA streamlining for GHG emissions from new developments;
- Create green jobs through incentive-based policies such as manufacture and installation of solar panels;
- Improve public health by removing harmful pollutants from our air and improve water quality;
- Increase local control over the City's future by reducing dependence on imported water and energy;
- Enhance quality of life by supporting active transportation, planting trees and reducing landfill waste;
- Save taxpayer money by decreasing municipal water, waste, and energy usage in Cityowned buildings.

The Draft PEIR appears to rely on mitigation measures which are the responsibility of other agencies (see discussion on Draft PEIR page 2-5). The California Environmental Quality Act (CEQA) Guidelines require mitigation that is legally enforceable by the lead agency preparing and approving the environmental document.

For example, page 2-5 of the Draft PEIR states: "An important regional action that the CAP relies on is the implementation of Senate Bill 375 (SB 375), which establishes mechanisms for the development of regional targets for reducing passenger vehicle greenhouse gas emissions. SB 375 was adopted by the state on September 30, 2008. In compliance with SB 375, SANDAG adopted the 2050 RTP/SCS on October 28, 2011."

4. As stated in the CAP, the goals for Strategy 3, Bicycling, Walking, Transit and Land Use, are to increase the use of mass transit, increase commuter walking and bicycling opportunities, and promote the effective land use to reduce vehicle miles traveled. Proposed actions to implement this strategy include the following: Action 3.1: Implement the General Plan's Mobility Element and the City of Villages strategy in TPAs to increase the use of transit. The target for Action 3.1 is to achieve mass transit mode share of 12 percent by 2020 and 25 percent by 2035 in TPAs. The City of Villages strategy is the overarching vision for future land use in the City of San Diego. The strategy would encourage the intensification of land uses in TPAs that would allow more residents to rely on transit for their primary commute mode. The strategy does not specifically assign uses to land in the City, but rather would be implemented with the update and adoption of each community plan.

TPAs, shown in Figure 2-1 of Draft PEIR, are based on the adopted SANDAG 2050 Regional Transportation Plan (RTP), which is currently being updated as a part of the San Diego Forward Regional Plan. The Transit Priorities Area map will be updated to reflect the updated RTP following adoption by the SANDAG Board,

Response to Comment J-4

The CAP used the most current information available at the issuance of the Notice of Preparation to calculate the GHG emission reductions from walking, biking, and transit. When SANDAG amends its Regional Transportation Plan, the City will amend the calculations to reflect the most current data. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

Comment Letter J

PCPB Comments on Draft PEIR for City of San Diego CAP
September 17, 2015
Page 4

which is anticipated to occur in the fall of 2015. SB 743 established Section 21099 of the California Public Resources Code (CPRC), which states: "Transit priority area" means "an area within one-half mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations."

The PCPB supports increasing use of mass transit, increase commuter walking and bicycling opportunities, and promote the effective land use to reduce vehicle miles traveled. However, reliance on TPAs that are being updated is a concern PCPB because the analysis of how this measure will result in reductions in GHG is speculative and therefore the analysis in the Draft PEIR is not adequate.

5. The Draft PEIR states on page 3.A-20, implementation of the CAP would generally be consistent with all applicable land use plans, policies, and regulations of agencies with jurisdiction over the Project, and would not conflict with any land use plans. Some projects undertaken pursuant to the CAP or in support of CAP programs, particularly the development of large-scale renewable energy facilities within the City limits could conflict with existing land use and zoning designations or could conflict with adjacent land uses. This could result in a significant land use impact.

The Draft PEIR fails to identify potential locations for development of large-scale renewable energy facilities within the City limits, and in particular the Peninsula community, and that this issue has not been adequately addressed in the Draft PEIR.

6. While the intent of the PEIR was to identify potential impacts that would result from implementation of the CAP, the analysis is not detailed to the level of site specificity. The CAP includes actions to be implemented in the near term (from adoption of the CAP through December 31, 2017) and mid-term (from January 1, 2018 – December 31, 2020).

The Draft PEIR fails to adequately address the environmental effects of those actions that have been identified in the short term and mid term.

The PCPB appreciates the opportunity to provide comments on the Draft PEIR for this project and looks forward to receiving the Draft Final PEIR for review. Please direct any questions on these comments to me at: pcpbem@gmail.com.

Sincerely,



JULIA M. QUINN, Chair
Peninsula Community Planning Board

Approved by an Action of the Peninsula Community Planning Board on September 17, 2015.

Response to Comment J-5

The CAP is intended to more fully address projected communitywide greenhouse gas (GHG) emissions and provide a plan for reducing such emissions. As a Program EIR, the Draft EIR was prepared to consider broad programmatic issues at an early stage of the program planning. The Draft EIR analysis provides for the consideration of broad policy alternatives and development of program-wide mitigation measures at an early stage. See CEQA Guidelines §15168(b)(4).

As identified in the Draft EIR, Chapter 3A, Land Use, the specific location for siting of future large-scale renewable energy facilities is not known at this time. However, as discussed in the Draft EIR, future land use changes and any large-scale renewable energy projects proposed to implement the CAP would undergo further CEQA analysis to identify project-specific impacts, to identify feasible mitigation measures, and to consider alternatives, and to provide for public review and comment, prior to approval of any plan or project. Through the CEQA process, the compatibility of surrounding land uses and applicability of all land use plans would be reviewed to determine land use impacts that would result from a particular project, once sufficient detail is available to provide for meaningful environmental review. Additionally, the Draft EIR includes Mitigation Measure LU-1, which addresses the siting of large-scale renewable energy projects.

Response to Comment J-6

As discussed above in Response to Comment J-5, the Program Draft EIR is a first-tier programmatic environmental document and detailed site-specific information such as siting of future large-scale renewable energy facilities is not currently known. However, the Draft EIR provides a program level of analysis of the CAP strategies, actions, and supporting measures to be implemented at each phase of the project (Phase 1: Early Actions; Phase 2: Mid-Term Actions and Phase 3: Longer-Term Actions).

LETTER

RESPONSE



9325 Sky Park Court
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Comment Letter K

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September 22, 2015

Delivered to CAP@SANDIEGO.GOV and DSDEAS@sanidiego.gov

The Mayor's Office

The Honorable Kevin Faulconer, Mayor of San Diego

Mike Hansen, Policy Advisor for Land Use and Environment

The Committee on the Environment of the City Council of the City of San Diego

Councilmember David Alvarez, Chair
Councilmember Chris Cate, Vice Chair

Councilmember Todd Gloria
Councilmember Marti Emerald

Climate Action Plan City Staff Leads

Rebecca Malone, Associate Planner

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Planning

David Weil, Deputy Director, Energy,
Sustainability & Environmental Protection

Cody Hooven, Sustainability Manager

Dear Mayor Faulconer, Environment Committee Members, and CAP City Staff Leads,

The Center for Sustainable Energy® (CSE; www.energycenter.org) appreciates the opportunity to submit comments in response to the July 2015 Draft Program Environmental Impact Report (PEIR) of the City of San Diego Climate Action Plan (CAP). CSE commends Mayor Faulconer and City staff for the forward-thinking climate planning strategies the document outlines, as well as the overall vision the plan lays out for a resilient, vibrant, and clean city of San Diego.

K-1

On July 7, 2015 CSE submitted initial comments on the Climate Action Plan addressing the need for strong energy efficiency goals, emphasizing the role of local economic development in reaching 100% clean energy, and offering suggestions for multi-modal transit goals. The issues addressed in these comments continue to be relevant to the CAP and are attached to this letter for your consideration.

K-2

As the City prepares to finalize the CAP, CSE emphasizes the importance of energy benchmarking and transparency for commercial and multifamily buildings, particularly given the recent adoption of the California Energy Commission's Existing Buildings Energy Efficiency Action Plan (AB 758 Action Plan) and passage of Assembly Bill 802 and onto the Governor's desk to be signed. Along with the importance of incorporating commercial and multifamily buildings back into the plan, it is important to continue the strong, local momentum to promote and bolster local economic development and job growth.

K-3



Response to Comment K-1

Comment noted.

Response to Comment K-2

Comment noted. The attached letter comments on and provides recommendations for the CAP. The letter does not address the adequacy of the Draft EIR. The attachment letter can be found in Appendix 8.

Response to Comment K-3

This comment does not address the adequacy of the Draft EIR. Comment noted. Additionally, the CAP accounts for commercial building energy efficiency and disclosure under Federal and State Actions (see CAP Appendix pages A-47 to A-48). While not included in the CAP, any additional requirements that are implemented in the future with respect to such actions would contribute to an even greater amount of anticipated GHG reductions. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

Comment Letter K

CSE commends the inclusion of energy efficiency disclosure and reporting in the residential sector; we would also like to see it in commercial and multifamily buildings.

Commercial and multifamily energy efficiency offers the greatest opportunity for cost-effective carbon reductions. A benchmarking and transparency ordinance is the first step to understand energy-savings opportunities and encourage energy retrofits and behavioral changes of building occupants. Currently, the buildings sector is the single largest polluter of carbon emissions in the United States as a whole, and the second largest in the San Diego region, after transportation.

The California Energy Commission passed the *Existing Buildings Energy Efficiency Action Plan* on September 9, 2015, providing a roadmap for doubling energy efficiency in buildings. The Action Plan calls for a statewide benchmarking and transparency program for commercial and multifamily buildings starting in 2017¹ and cites grant opportunities for cities that adopt nonresidential (commercial and multifamily) benchmarking programs in advance of the Energy Commission's requirements.² This is an exciting opportunity for the City of San Diego to take the lead on energy efficiency and secure resources to prepare local stakeholders for energy tracking in EPA's Portfolio Manager tool in advance of a statewide requirement.

Remaining silent on energy efficiency in commercial and multifamily buildings will result in San Diego falling behind other major cities in California and across the country that have already implemented comprehensive building energy efficiency measures and are on the direct path of realizing cost-effective energy savings.

In regard to Strategy 1 of the PEIR pertaining to energy and water efficient buildings, the energy savings potential and benefits for the commercial buildings sector are significant. Table 2-4, "Growth Assumptions used in the City of San Diego Climate Action Plan", of the PEIR highlights the data included in the CAP and quantifies the predicted growth in the city in a table. Given the expected growth of the Commercial Building Area which is expected to grow to 398 million square feet by 2035, it is imperative San Diego invest in green buildings and building emissions reduction efforts immediately, including short-term high priority actions.

Benchmarking and reporting the energy and water consumption of buildings is a national best practice; these strategies in the commercial buildings sector directly translate to building performance improvements and reductions in GHG emissions. It is an investment that pays dividends in the long term – both financially and environmentally. Brokers, consumers, local residents, building owners and managers, and tenants all stand to reap the subsequent benefits of implementing building efficiency measures.

K-3

¹ Existing Buildings Energy Efficiency Action Plan, California Energy Commission, p. 45

² *Ibid.* p. 56

LETTER

RESPONSE

Comment Letter K

The City of San Diego has the potential to meet the 100% renewable energy goal by 2035. We encourage focusing on local economic benefits to strengthen San Diego's clean energy sector.

In addition to the inclusion of a commercial and multifamily benchmarking and transparency ordinance in the final Climate Action Plan, CSE recommends the efforts to achieve renewable goals to be local in nature and benefit local renewable energy businesses, create jobs, and increase resiliency and investments in the city.

Through the actions outlined in this plan, we see tremendous potential to continue to grow the local clean energy sector thereby creating jobs, attracting investors, and enhancing San Diego's role as a national leader in sustainable energy technology.

San Diego has the potential to capitalize on the strong clean energy presence already in the region. It is up to us as a prominent city to continue to build upon our strengths to attract growth, create jobs, and maximize the potential of clean energy technologies and programs.

Additional priorities CSE would like to see included in the CAP include increased bicycling, walking, transit, and land use policies; zero emission vehicle adoption in the municipal fleet; electric vehicle fueling expansion; and overall policies to reduce vehicle miles traveled.

As San Diego engages in the planning and implementation of the CAP, we provide these comments to encourage the City to demonstrate commitment to energy efficiency in all buildings, create strong opportunities for local businesses, and to offer residents and businesses alike the awareness of opportunities to save money on electricity to expedite overall transition toward clean energy technologies and markets.

Kind Regards,



Jack Clark
Director of Programs
Center for Sustainable Energy
Board Member, San Diego Energy Advisory Board
Member, SANDAG Energy Working Group



Hanna Grene, LEED AP
Policy Manager, Energy Efficiency and Building Performance
Center for Sustainable Energy

Response to Comment K-4

This comment does not address the adequacy of the Draft EIR. Comment noted.

Response to Comment K-5

This comment does not address the adequacy of the Draft EIR. Comment noted.

LETTER

RESPONSE

Comment Letter L

Community Energy Action Network

a San Diego-based cooperation promoting local clean energy

September 24, 2015

Rebecca Malone, Associate Planner
City of San Diego Planning Department
1222 First Avenue, MS 501
San Diego, CA 92101

By USPS and EMAIL: DSDEAS@sandiego.gov

SUBJECT: Comments on the Draft Program Environmental Impact Report

PROJECT NAME: San Diego Climate Action Plan

SCH NO.: 2015021053

Dear Ms. Malone:

I am submitting these comments on the Draft Program Environmental Impact Report for the San Diego Climate Action Plan (CAP) on behalf of the Community Energy Action Network, a San Diego-based cooperation promoting local clean energy.

My comments are related to the adequacy and accuracy of the PEIR with respect to the following Project Objectives:

- Create green jobs through incentive-based policies, such as the manufacture and installation of solar panels;
- Increase local control over the City's future by reducing dependence on imported water and energy;
- Save taxpayer money by decreasing municipal water, waste, and energy usage in City-owned buildings.

The PEIR and CAP should include recommendations that the City Sustainable Energy Advisory Board have made over the past two years to the Mayor and City Council in the areas of Solar Energy system permitting, CCA feasibility/validation studies, Net Energy Metering and residential electric rate restructuring in pertinent sections as appropriate. These documents are available through the City's Energy and Sustainability Division of the Environmental Services Department.

1. CCA: Strategy #2 "Clean and Renewable Energy, Action 2.1 is listed as a "Phase 2" item. "Present to City Council for consideration a Community Choice Aggregation (CCA) or another program that increases the renewable energy supply on the electrical grid.*"

Action Item 2.1 regarding presenting a proposal for a Community Choice Aggregation energy district or an alternative needs to be a higher priority and phased in earlier. If the phasing noted corresponds to the implementation periods cited, it is not unreasonable and, in fact, highly desirable to present (emphasis added) a CCA or another program to the City Council" within the next two years (ie, a Phase 1 activity to be completed by December 31, 2017).

L-1

L-2

L-3

Response to Comment L-1

Comment noted.

Response to Comment L-2

Comment noted.

Response to Comment L-3

This comment does not address the adequacy of the Draft EIR. Comment noted.

Comment noted.

LETTER

RESPONSE

Comment Letter L

Comments on the Draft Program Environmental Impact Report
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City staff and the City Sustainable Energy Advisory (SEA) Board are in the process of reviewing components of City-funded validation study on the results of an independently-funded CCA draft feasibility study. SEA Board has communicated factors to be included in the study and establishment of a CCA by letter to the Mayor and City Council that should be incorporated in the Draft PEIR.

A Phase 1 designation for the evaluation and presentation of the CCA or other program to the City Council is critical to meet the project objective to increase local control and reduce dependence on imported energy and achieve the target to add additional renewable electricity supply to achieve 100 percent renewable electricity by 2035 city-wide. It is also critical to consider options for the City municipal facilities including more efficient operation of public infrastructure such as lighting that will not subject the City to rate increases for operation of those investments.

Table 3.1 Local, Regional and Federal Actions assigns 2,603,944 MT CO₂e to Action item 2.1. This is nearly three-quarters of the Total Reductions from Local Actions of 3,531,399 MT CO₂e. Every year of delaying the implementation of an enforceable, effective program to promote renewable energy within the City of San Diego adds significantly to later year requirements.

2. "Energy Resources" description at page 1-11 in the Introduction and Environmental Setting is deficient and includes inaccuracies. SDG&E recently published a "Power Content Label", circulated in the bills of all customers that sets forth the SDG&E 2014 Power Mix. This information should be included in this section.

The description of energy resources should acknowledge the generation of electricity, largely photovoltaic electricity independently produced by residents, businesses and institutions. The current baseline of renewable distributed energy should be provided as a benchmark. An estimate of the potential capacity of roof top and covered parking lot photovoltaic installations for the City should be included – even if it is expressed as an approximate prorated portion of the estimated 7,000 Megawatt potential in the entire SDG&E service territory.

The role and expectation of the agency or entity that will use the public right of way for distribution of energy sources in making the transition to 100% renewables with an emphasis on locally generated renewable energy, employment of storage technologies and demand management strategies needs to be defined in the CAP and made a part of the conditions for the City franchise agreement for operation of distribution lines within the public right of way.

Alternatives to the formation of a CCA should include the potential for municipal public utility options and aggregation and consortium of micro energy districts in accord with City Charter provisions.

L-3

L-4

L-5

Response to Comment L-4

The information regarding SDGE has been corrected in the FEIR. In the baseline year (2010), the amount of energy in the SDGE mix from solar was 0.0 percent. This is why it is not listed as an energy source.

Response to Comment L-5

Comment noted. The CAP is a planning-level document. Details related to actions identified within the CAP will be explored during implementation of the CAP.

LETTER

RESPONSE

Comment Letter L

Comments on the Draft Program Environmental Impact Report
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3. Economic Development. California Solar Energy Industry Association cited in statewide study, "California Solar Jobs Census 2014" released on February 12, 2015 that there are 54,690 workers at 3,813 establishments throughout the State of California.

The PEIR should include current jobs in the solar industry and within the energy efficiency industries within the City and/or region as a baseline and identify the need for a stable Net Energy Metering program to ensure sustainable growth of the solar industry job and business sector. The SEA Board recommendation and resolution forwarded in a recent letter to the Mayor and City Council regarding economic development implications of the Net Energy Metering program should be incorporated as a part of the PEIR.

L-6

4. Community Development and Equity. The baseline and potential quantified targets for achievement of project objectives and plan targets in each of the plan actions should be prepared for each community planning area and eventually tracked by census tract.

The CAP PEIR should address the methods and incentives contemplated by the actions proposed to ensure equity in the allocation of resources so that "communities of concern" are able to participate and realize the benefits of energy efficiency and renewable energy installations as well as the jobs created in making those installations.

L-7

This strategy should be integrated with the City's Consolidated Plan for expenditure and leveraging of Federal CDBG and HOME funds as well as funds made available through distribution of cap and trade funds and redevelopment loans which the state has authorized for reimbursement to the City.

5. Inter-relationship of CAP Actions.

A number of the CAP strategies and actions in areas not categorized as energy will have impact on energy use. As examples, achieving the objective of reducing dependence on imported water may reduce costs of pumping and transporting water, but increase energy use for treatment of waste water.

L-8

How any new energy needs are created in an area such as water reclamation should be clearly addressed along with the actions to achieve water and energy savings in municipal facilities. As in energy conservation, the best strategy for cost saving in water is efficiency first.

In the treatment of waste and generation of methane, the potential for capture and potential use of methane for energy generation should clearly indicate the cost benefit and net impact on GHGs.

L-9

Response to Comment L-6

This comment does not address the adequacy of the Draft EIR. Comment noted. See CAP Chapter 4 regarding job creation.

Response to Comment L-7

Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting. Please see CAP Chapter 4 regarding social equity.

Response to Comment L-8

CAP Appendix A describes the methodology used to determine GHG emissions reductions from CAP Actions. The section on Common Assumptions and Sources in CAP Appendix A includes a discussion of the relationship between the GHG emissions rate and CAP measures. This section outlines the ways in which the CAP measures are interrelated and what was done to account for this in calculating the GHG emissions reductions from the CAP. As for the example in the comment, the CAP does not include recycled water as an action item, so any reductions or increases in GHG emissions from less reliance on imported water were not included in the GHG reduction calculations. A description of the City's Pure Water Program was included in CAP Chapter 5, Adaptation.

Response to Comment L-9

Please see Response to Comment L-8.

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Comments on the Draft Program Environmental Impact Report
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An area that the CAP does not evaluate is telecommuting, also referred to as “telework”. While the City may not mandate this practice for other employers, it can evaluate for the City workforce and as appropriate with contractors. The City could incentivize this practice and support a demonstration program to evaluate the potential to reduce GHG generation and other impacts of commuting such as land use for additional lanes and parking spaces for rush hour commutes.

L-10

Appropriate installation of the urban forestry measures proposed as adaptation measures needs to include not interfering with potential for roof top and parking lot solar energy installation. Installation guidelines need to be coordinated to achieve the maximum benefits of each measure – shade, carbon absorption, electric generation. PV installations by creating shade can significantly reduced heating loads on buildings and parking areas as well as contribute to the charging infrastructure for expansion of electric powered vehicles.

L-11

6. Advantages of local, small scale distributed generation of renewable energy. The Executive Summary section, Table ES-1 identifies a potential significant impact in “A. Land Use” from installation of large-scale renewable energy projects. The mitigations proposed include siting guidelines. For (H) Water supply, Table ES-1 recommends a Water Supply Assessment to ensure that large scale renewable energy projects do not use excessive amounts of water.

L-12

The PEIR should note that the emphasis for renewable energy generation should be on technologies that use little or no water and are smaller scale, distributed systems and/or technologies such as photovoltaic panels located on rooftops, parking lots and other developed structures as the preferred, highest priority strategy to achieve renewable energy goals. This will help avoid the impacts of siting facilities on undeveloped land that may create significant visual and other adverse impacts, including adversely affecting the goal of generating local food sources and providing parks and open space areas.

Thank you for your consideration. Please contact me at (619) 813-8485 or email hcjpowell@cox.net if you have any questions and please include me on future noticing of proposed changes and public hearings on the CAP PEIR.

- 5 -

HC Jay Powell
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San Diego, CA 92116
hcjpowell@cox.net
(619) 813-8485

File: SOLARSD/CAP PEIR CEAN comments 092415

Response to Comment L-10

This comment does not address the adequacy of the Draft EIR. Comment noted.

Response to Comment L-11

The CAP includes actions and strategies that address both the Urban Tree Planting Program and Clean and Renewable Energy. Upon adoption of the proposed CAP program, the City will establish policies, programs and ordinances that facilitate and promote the Urban Tree Planting Program and the siting of new onsite photovoltaic energy generation and energy storage systems. As part of the annual monitoring program, City staff will annually evaluate city policies, plans and codes as needed to ensure the CAP reduction targets are met.

Response to Comment L-12

The Draft EIR addresses the potential impacts that may occur with implementation of the proposed CAP strategies and actions. The CAP does not propose to construct any site-specific renewable energy infrastructure projects; rather, Action 2.1 directs the City to consider adoption of a community choice aggregation program, or other program, to leverage its purchasing power for renewable sources of energy. This would include encouraging and facilitating the installation of distributed (small-scale) renewable energy systems for homes and businesses. It may also result in the need for large-scale generation, transmission, and storage systems to maintain a consistent energy supply. The potential impacts associated with the construction of large-scale renewable energy facilities are discussed in DEIR Chapter 3.

LETTER

RESPONSE

Comment Letter M

From: Donna Shanske
To: PSD EAS
Subject: Comments regarding SD Climate Action Plan, SCH NO: 2015021053
Date: Sunday, September 27, 2015 4:56:40 PM

Attention: Rebecca Malone

I have briefly reviewed the City's Climate Action Plan to reduce green house gases in San Diego. It is a great effort with many positive ideas expressed. I only have the following realistic concerns about the plan's implementation:

- Tree-Planting program using recycled or grey water. With this program, we are still dependent on most of our water from outside sources. If the drought continues [after El Nino], these sources will dry up, and we could become dependent on de-salinization plants along the coast that are not even "on the radar." More trees could absorb some of the air pollution from the ever-increasing number of cars on the streets of San Diego + the air pollution from Interstate 5 and the airport that earns San Diego an "F" for ozone and fine particulate matter in the coastal zones by the Lung Association.
- SANDAG's Bike-Ride-Walk program: San Diego's County/City Development Plan mimics that of Los Angeles, i.e., development of large suburban areas that are dependent on the freeway system (cars) to get to everywhere outside of their neighborhoods. Even in the Uptown Neighborhoods, most residents do not work Downtown; to be able to afford our rents/mortgages, we must have good-paying jobs in Poway (military contractors), UTC (banks, RE, investments), Sorrento Valley (biotech) or Carmel Heights (business/pharma/biotech) companies. The SD Planning Department has only attracted Semptra Energy (1968) to headquarter downtown. Also federal, state, city jobs, the courts, etc. are downtown, but most of these jobs do not pay enough to be able to afford the rents/condos in our Uptown neighborhoods.....hence, no one in my neighborhood takes the bus or walks/bikes to work. (Residents get on the 5/805 to head North each morning.) We have had a bike lane on 5th Ave. since May, 2014, (Elm up to Hillcrest) with rarely a bicycle using it.....seems dangerous really, as 700 more hi-rise units have been approved for our neighborhood in the next 1.5 year with approx. 1500 more cars without infrastructure improvements + increasing air pollution.
- Seems a rational approach with the Bike-Ride-Walk would be to identify where people live and how they get to work ---then create an approach for them to get to work without their cars. MTS also needs to become more rider-friendly. The Dash in L.A. charges 50-cents/25-cents for Seniors and is PACKED with riders. Monthly S.D. MTS passes are \$72.00 = more than one day's wages for so many making \$9.00/hour in San Diego. (Note: The 40,000 jobs created in San Diego last year were mostly those paying poverty wages - retail and service-oriented.) Over the summer, seniors were required to either show their I.D. every time they rode the bus OR go downtown and stand in the long line to get a new picture I.D. How about having one day a week FREE to everyone on the MTS + reduced fares!!

As mentioned, the Climate Action Plan is a good start; its implementation will be the challenge.

Good luck -- to all of us!

Thank you,
 Donna Shanske
 Bankers Hill

M-1

M-2

Response to Comment M-1

Comment noted. Implementation of Action 5.1 would increase the urban tree canopy coverage. The program includes water conservation measures to minimize water use for tree plantings, use of drought-tolerant plantings and native trees, and prioritizing planting in areas with recycled water and grey water infrastructure. Although the increase in urban tree canopy would result in additional use of water, the program would be developed to conform to current and future water use restrictions. The use of recycled water and drought tolerant and native planting and tree species would also reduce the demand for water.

Response to Comment M-2

This comment does not address the adequacy of the Draft EIR. Comment noted.

LETTER

RESPONSE

Comment Letter N

Bill Tippetts
5850 Soledad Mountain Road
La Jolla, CA 92037

September 28, 2015

Rebecca Malone, Associate Planner
City of San Diego Planning Department
1222 First Avenue, MS 501
San Diego, CA 92101

Submitted Via Email to: DSDEAS@sanidiego.gov

Subject: Comments on the City of San Diego 2015 Climate Action Plan (CAP) and Draft Programmatic Environmental Impact Report (PEIR); Project Number IO No:21002571/11003392

Dear Ms. Malone:

These comments on and recommendations for the CAP and PEIR are submitted in response to the City of San Diego's July 31, 2015 Public Notice of PEIR (comments period closes September 29, 2015). The CAP presents a reasonable overall strategy and many measures to reduce greenhouse gas (GHG) emissions that, if augmented/modified along the lines in the comments and recommendations herein (and those of other environmentally-oriented commenters), would also serve as an important model for other local jurisdictions. The PEIR provides a reasonable assessment of potential impacts that could result from implementing the CAP and identifies mitigation measures to address most of those impacts. However, as identified in these comments and recommendations, there are a number of uncertainties and questions regarding the adequacy of those measures, clearer assurances are needed that the identified CAP's measures can/will be implemented, and important additional measures should be included - in an amended CAP/PEIR (proposed project/EIR). Additional or modified PEIR mitigation measures are needed that establish relevant thresholds of significance (particularly for GHG emissions). This letter provides recommendations to improve the CAP (the proposed project) and the PEIRs mitigation and implementation.

The San Diego region and the City of San Diego have made significant commitments and fiscal investments to conserve important habitats and species, preserve and enhance bay and coastal resources, and provide for improved quality of life for its citizenry. Although the City's efforts through its CAP can only partly address (i.e., reduce) the drivers of climate change - especially GHG emissions - it can also serve as an example for other urban centers to aggressively confront and reduce their GHG emissions while maintaining/improving their quality of life.

As stated in the PEIR's public notice (page 2): "The CAP relies on significant City and regional actions, continued implementation of federal and state mandates, and five local strategies with associated action steps for target attainment. The five strategy areas are: Water & Energy Efficient Buildings; Clean & Renewable Energy; Bicycling, Walking, Transit & Land Use; Zero Waste (Gas & Waste). Implementation of the CAP is divided into: Early Actions (Adoption of the CAP-December 31, 2017), Mid-Term Actions (January 1, 2018-December 31, 2020), and Longer-Term Actions (2021-2035). Through

N-1

N-2

N-3

Response to Comment N-1

Comment noted. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting. The City is working on refining and formulating appropriate GHG significance thresholds, and anticipates bringing such thresholds for City Council consideration in 2016.

Response to Comment N-2

Comment noted.

Response to Comment N-3

As part of the CAP implementation strategy, the City intends to monitor the effectiveness of CAP actions at reducing GHG emissions. This will enable the City to make adjustments to the CAP, including implementing new, more aggressive strategies to achieve the City's GHG reduction targets beyond 2020, if needed. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting. As stated on page 29 of the CAP, the City "recognizes that given the long planning horizon of the CAP, it may become necessary to modify the specific actions as circumstances change over time. While the City is committed to meeting the 2020 and 2035 GHG reduction targets, the City recognizes that there are multiple ways to achieve that goal and that flexibility in implementation is necessary to allow the City to evolve its strategies to achieve the most effective path to the desired result. Specifically, for identified local ordinance, policy or program actions to achieve 2020 and 2035 GHG reduction targets, the City may substitute equivalent GHG reductions through other local ordinance, policy or program actions." Achieving the specified 2020 and 2035 targets would be ensured through implementation for the monitoring and reporting measures set forth in CAP Chapter 3. With respect to the CAP as a qualified GHG reduction plan under CEQA, since the Draft EIR was published, the City has decided to refine and formulate its approach to utilizing the CAP as a qualified GHG reduction plan. Accordingly, the CAP has been changed to provide for the future implementation of the CAP as a qualified GHG reduction plan to address both the 2020 and 2035 targets. It is anticipated that future implementing actions will be brought to the City Council for consideration in 2016.

Comment Letter N

2020, the CAP meets the requirements set forth in CEQA Guidelines Section 15183.5, whereby a lead agency (e.g. the City of San Diego) may analyze and mitigate the significant effects of GHG emissions at a programmatic level, such as in a general plan, a long range development plan, or a separate plan to reduce GHG emissions. Following adoption of the CAP, eligible individual projects preparing project-specific environmental documents may tier from and/or incorporate by reference the CAP's programmatic review of GHG impacts in their cumulative impacts analysis by using the CAP Compliance Checklist (Appendix A of the CAP) and the 'GHG Emissions Screening Criteria'."

The CAP proposes a reasonable approach to reducing GHG emissions, particularly up to 2020. After that, the CAP would not be as effective in terms of meeting the City's "fair share" of the state's GHG emission reduction targets and a number of improvements to the CAP should be made before it is approved and the PEIR is certified.

Comments/Recommendations:

The following comments and recommendations focus on biological/environmental (including GHG emission) concerns. Issues regarding visual and neighborhood character (including social justice) and historical resources, which are equally important, are not commented to the same extent because the commentator is less familiar with specific issues related to those topics, not necessarily because they are fully addressed by the PEIR.

The PEIR must clarify how actions and projects after 2020 will be processed – for example, does the City propose that projects to be implemented post-2020 also can use this document for tiering purposes, if they are consistent with the CAP and PEIR (which will likely be amended in future years to reflect changing scientific information, technological advances, etc.)?

Page ES-2 cites Executive Order S-3-05 (state's GHG emission reduction target of 80% below 1990 statewide GHG emission levels by 2050); EO B-30-15 (interim target of 40% below 1990 statewide GHG emission levels by 2030); and AB 32, setting an initial target to reduce GHG emissions to 1990 levels by 2020 and requiring CARB to prepare a scoping plan with a pathway for local governments to contribute their fair share toward meeting the statewide 2020 target. The City's proposed CAP is expected to meet the 2020 target (the City's "fair share") and extends to/establishes an interim (2035) "fair share" GHG emissions reduction target between the state's 2030 requirement and 2050 target.

The recently updated (2013) GHG inventory for SD County documented that the county's 2010 GHG emissions were approximately 9% higher than its 1990 GHG emissions (<http://catcher.sandiego.edu/items/usdlaw/EPIC-GHG-2013.pdf>) or about 29 MMTCO₂e for 1990. Assuming that a similar relationship (2010 GHG level is about 9% higher than 1990) existed for the City of San Diego, then the City's 1990 GHG emissions were about 11.8 MMTCO₂e. Based on the proposed CAP's approach to establish its GHG emission thresholds on its 2010 emissions, then it appears the reductions would be consistent with the state's GHG "fair share" reductions, at least for the 2020 target: the CAP's proposed 15% reduction from 2010 levels by 2020 would result in emissions of 11.1 MMTCO₂e and the conformance with state's strategy would require City's GHG emissions to be reduced to the 1990 level, or about 11.8 MMTCO₂e. However, applying the 2010 baseline and subsequent target year percentage reductions, the City would not fully meet the state's GHG reduction requirements. Specifically, a 40% reduction in 2010 levels by 2030 would result in 7.8 MMTCO₂e vs. 7.1 MMTCO₂e of

N-3

N-4

N-5

N-6

Response to Comment N-4

Comment noted.

Response to Comment N-5

Please see Response to Comment N-3.

Response to Comment N-6

See Response to Comment N-3 regarding updates to the CAP. In Draft EIR Section 3.D Greenhouse Gases, Issue 2 discusses whether the CAP would conflict with the GHG reduction targets and measures identified in Governor's Executive Order S-3-05, Executive Order B-30-15, and CARB's AB 32 Scoping Plan. Please refer to Draft EIR section 3.D for additional analysis. Please also see Response to Comment J-1.

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emissions to fully meet the state-based (1990 baseline) target; a 50% reduction by 2035 would result in 6.5 MMTCO₂e vs. 5.9 MMTCO₂e of emissions to fully meet the state (1990 baseline) target; an 80% reduction by 2050 would result in 2.6 MMTCO₂e vs. 2.4 MMTCO₂e of emissions to fully meet the state (1990 baseline) target.

However, as documented in the CAP and PEIR documents, the CAP is expected to reduce GHG levels by more than the City's targets ("...it is anticipated that the City would exceed its reduction target by 1.3 MT CO₂e in 2020, 176,528 metric tons (MT) CO₂e in 2030, and 127,135 MT CO₂e in 2035."). This information, combined with the above paragraph, indicates that the CAP would align with – but not fully achieve – the state's goals after 2020. The inclusion of several new measures (recommendations in this letter and other reasonable/viable recommendations from other commenters) would further reduce the GHG emissions and the CAP should be revised so that it fully meets the state-based 1990 baseline GHG emission reduction targets. Additionally, the CAP should have a requirement for regular review and updates (at least every 3-5 years) and the City should commit to adjust its GHG emission reduction targets and implementation actions so that they fully meet the state's or other more rigorous targets, as appropriate.

Page ES-3 lists nine plan objectives including providing the roadmap to GHG reductions, complying with state targets and regulations, implement Gen Plan climate policies, CEQA streamlining for GHG reductions by projects, improve local control over and reduce dependence on imported water and energy use, improve air and water quality/reduce pollutants, create green jobs/energy efficiencies, enhance quality of life through active transportation/tree planting/waste reduction, save taxpayers money. Subsequent comments and recommendations are provided on several of these items that would improve the City's proposed GHG emission reductions in the short and mid-term, bringing it closer to conformance with the state's targets.

Pages ES-3 to 5 identify a number of Significant and Unavoidable Potential Impacts to Historical Resources, Air Quality, Transportation and Circulation network, Visual Effects/Neighborhood Character. The mitigation element proposes that potentially significant effects to the items listed above (except for Historical Resources) as well as to GHG emissions and Land Use, except for Historical Resources, can be mitigated to below levels of significance.

Page ES-4 identifies two Project Alternatives: No Project and the 2012 Climate Mitigation and Adaptation Plan. CEQA requires that a range of reasonable/feasible alternatives be presented for public review. Presenting only two alternatives has the effect to limit the number and range of potentially feasible avoidance, minimization and mitigation measures for review by the public and consideration by the lead/adopting agency (the City/City Council). Given the limited scope of the alternatives, this comment letter requests that the proposed project (CAP) be amended to include additional/modified avoidance, minimization and mitigation measures.

Table ES-1: Issue A.1 (Land Use – large energy facilities siting/operations) focuses on potential impacts from facility siting and operations and the primary mitigation measures are to ensure that any proposed facility (within the City's purview) conform to a proposed project (impact minimizing) checklist, community/neighborhood plans, etc. A checklist is essential to verify whether a project meets the requirements of the CAP and its impacts are below the thresholds/criteria for significant impacts, and to provide information regarding what, if any, modifications would be required to achieve compliance

N-6

N-7

N-8

N-9

N-10

Response to Comment N-7

Comment noted.

Response to Comment N-8

Please see Response to Comment J-2.

Response to Comment N-9

The commenter is requesting that additional and/or modified avoidance, minimization, and mitigation measures be developed given the limited amount of alternatives evaluated in the Draft EIR. Consistent with CEQA Guidelines section 15126.6, the Draft EIR includes a range of reasonable alternatives that would feasibly attain most of the basic objectives of the project. See Draft EIR Chapter 8 for additional information regarding the selection of the alternatives considered.

In addition to the alternatives analyzed in the Draft EIR, the Draft EIR also included appropriate mitigation measures to reduce land use, air quality, and water supply impacts to a less than significant level.

Response to Comment N-10

Comment noted.

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(including ongoing monitoring and reporting). Comments on the checklist and monitoring/reporting aspects are provided later in this letter.

N-10

Issue C- AIR 1 and AIR 2 (Air Quality) – (1) construction projects will adhere to checklists and best available control measures and (2) recycling/organic operations will enact clean(er) practices including offsetting increased VMT effects. The proposed mitigation approach appears reasonable.

N-11

Issue D (GHG) identifies no significant effects related to (1) increasing (cumulative) GHG emissions from project activities or (2) conflicts with state targets/fair share expectations. As noted in previous comments, the proposed CAP intends to use the 2010 GHG baseline and specific percentage emission reductions, but after 2020 those reductions would not fully meet the state's targeted reductions for 2030 and 2050 – which is a potentially significant effect. Comments and recommendations to modify the proposed CAP (the proposed project) would further reduce GHG emissions and should be included in a revised CAP/proposed project.

N-12

Issue F (Transportation and Circulation) identifies less than significant impacts for general effects to the planned system/network or to adopted plans/policies with a mitigation measures for altering traffic circles-roundabouts and fuel use. A substantial concern regarding the CAP's proposed approach to avoiding/mitigating traffic and circulation effects is that the CAP relies too much on the (draft) SANDAG Regional Plan (RTP/SCS) to facilitate the City's smart growth and on the City's "City of Villages" strategy to increase population/housing densities along transit routes. The Regional Plan does little to strengthen the implementation of (the cities' and County's) existing transit priority areas and reduce demand for more freeways and major roads – and does not result in a substantial reduction in vehicle miles traveled. The City of Villages strategy, while potentially viable, has no assurances that it will be implemented through the community plans. Given those uncertainties, it appears that the CAP cannot fully rely on the anticipated benefits from the Regional Plan and Community Plans/City of Villages, which calls into question whether there will be significant impacts to traffic and circulation if the CAP is approved and implemented. As shown in Table 2-3, the CAP would not produce any land use/smart growth-derived GHG reductions by 2020 and the contributions in 2030 and 2035 are projected to be 3.5 and 3.1% of the total City reductions. Given the emphasis in the CAP on smart growth as an avoidance/mitigation measure, it appears that the City should specify implementation measures to both ensure that those minimum targets are met, and make serious efforts to increase smart growth planning to increase the contributions by 2030.

N-13

Issue H (Water Supply) identifies a potential impact regarding excessive water use and focuses on enacting mitigation measures to ensure that renewable energy facilities do not to use too much water and sets certain other significance thresholds for the amount of water projects could use. Water transport, treatment and recycling are significant energy demands, and the CAP should provide additional measures to reduce water demand. Recommendations are provided later in this letter to implement additional water reductions as part of the CAP strategies.

N-14

Page 1-3 (Qualified CAP): Per the PEIR, CEQA Section 15183.5(b)(1)(A)-(F) provides that a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project complies with the requirements in a previously adopted plan or mitigation program. The CAP incorporates project screening criteria and will include a Consistency Checklist for

N-15

Response to Comment N-11

Comment noted.

Response to Comment N-12

Comment noted. See response to Comment N-6 regarding use of the baseline year 2010. In Section 3.D Greenhouse Gases, Issue 1 considers whether implementation of the CAP itself, would generate GHG emissions, directly or indirectly, that may have a cumulatively significant impact on the environment. Although projects described in the CAP may result in short-term construction-related GHG emissions, "[i]mplementation of the CAP would reduce per capita GHG emissions. Implementation of the CAP would also result in an overall decrease in GHG emissions citywide."

Response to Comment N-13

As stated on Page 42 of the CAP, "the City will annually evaluate city policies, plans, and codes as needed to ensure the CAP reduction targets are met." This is the City's primary near-term mechanism of implementing CAP Strategy 3, Action 3.1, and Action 3.6, which would enable smart growth and transit-oriented development in transit priority areas. The City will begin these evaluations and updates as early as 2016. In addition, the General Plan contains multiple policies supporting smart growth and transit oriented development in TPAs (See City of Villages Strategy and policies ME-A.8, ME-B-1, ME-B.2, ME-B.3, and ME-B.9), and because the Community Plans are updated to be consistent with the goals of the General Plan, Community Plans would implement these goals within their land use element. Furthermore, the City will monitor the success of CAP actions so that the City may develop additional implementation measures in the future to support smart growth and transit oriented development and achieve the reductions quantified in the CAP for Strategy 3, Action 3.1, and Action 3.6. Various supporting measures are also provided within CAP Strategy 3 that would help support implementation of Actions 3.1 and 3.6.

Response to Comment N-14

Overall analysis of the CAP accounts for water supply in determining overall GHG reductions. Comment noted.

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projects to determine projects qualify (are not cumulatively considerable). Comments on the screening criteria are provided later in this letter.

Page 2-1 establishes the City's approach for establishing its 2020 GHG reduction target: "...such that statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25 percent reduction in emissions). AB 32 anticipates that the GHG reduction goals will be met, in part, through local government actions. The CARB has identified a (clarification added: 2020) GHG reduction target of 15 percent from 2010 levels for local governments (municipal and community-wide) and notes that successful implementation of the plan relies on local governments' land use planning and urban growth decisions as local governments have primary authority to plan, zone, approve, and permit land development to accommodate population growth and the changing needs of their jurisdictions." As commented on previously, this approach would meet the state's initial (2020) target, and the CAP proposes measures that would exceed the City's "fair share" contribution to the state's target – but implementing the CAPs subsequent targets would not fully meet the state's targets for 2030, 2035 and 2050, based on the 2010 baseline and percentage reductions. The CAP should include additional GHG reduction measures (as provided in this letter), and periodically revise the CAP to incorporate new technologies and actions to further reduce the City's GHG emissions so that they achieve the state's 1990-baseline based targets.

Page 2-4: The CAP estimates the GHG emissions for the City of San Diego in the baseline year 2010 were approximately 13.0 million metric tons of carbon dioxide equivalent (MMT CO₂e), of which the largest contributing sector was transportation (54 percent), followed by electricity use (24 percent), natural gas use (16 percent), and solid waste and wastewater collection, disposal, and treatment (5 percent). An essential focus of additional GHG reductions should be in the transportation (and land use/smart growth), building energy and water use sectors.

Pages 2-4 and 5 describe the GHG 2010 baseline (13.1 MMTCO₂e); BAU projections for 2020 (14.1 MMTCO₂e), 2030 (15.7 MMTCO₂e), 2035 (16.6 MMTCO₂e); if CAP implemented emissions reduced to 9.8, 7.6, 6.4 MMTCO₂e, respectively for those years) – CAP reduces GHG emissions by an additional 1.3, 0.18 and 0.13 MMTCO₂e, respectively, in those years, compared to the City's targets. In 2020, 2030, and 2035, a majority of the GHG reductions are associated with actions taken at the state and regional level (90 percent in 2020, 74 percent in 2030, and 65 percent in 2035). The City's CAP demonstrates its expectation to play an increasingly significant role in reducing overall GHG emissions, which is commendable.

Page 2-6: Table 2-2 documents that the SANDAG RTP/SCS (and the draft 2015 Regional Plan is little different) would have a decreasing role in (i.e., contributes a reduced percentage to) the city's GHG emissions through 2035. As described in earlier comments, the draft Regional Plan does not provide an appropriate regional framework for the individual cities to increase their "smart growth/transit priority areas" beyond what their extant general plans call for. Unlike the other reductions listed as "state and regional reductions," and as described in PEIR text, the City of San Diego not only participates in SANDAG's planning decisions, but also relies – in part – on an effective regional transportation and smart growth plan for its own transportation and circulation system.

The City has analyzed the current (2011) RTP/SCS and its contributions to support the General Plan's transportation/smart growth (Transit Priority Areas or TPAs) approaches, which are intended to

N-15

N-16

N-17

N-18

N-19

Response to Comment N-15

Comment noted.

Response to Comment N-16

Please see Responses to Comments N-3 and N-6.

Response to Comment N-17

Comment noted. The CAP includes strategies and actions to address transportation, building energy, and water use. Strategy 3: Bicycling, Walking, Transit, and Land Use includes six actions that would increase mass transit use, increase commuter walking, increase commuter biking, re-time traffic signals, install roundabouts, and promote effective land use to reduce vehicle miles traveled. Strategy 1: Water and Energy Efficient Buildings includes five actions that would provide for a Residential Energy Conservation and Disclosure Ordinance; a Municipal Energy Strategy and Implementation Plan; a new water rate and billing structure; a Water Conservation and Disclosure Ordinance; and an Outdoor Landscaping Ordinance.

Response to Comment N-18

Comment noted.

Response to Comment N-19

Comment noted. Please also see Response to Comment N-13.

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contribute to the city's GHG emission reductions. However, as a SANDAG member, the City should encourage the forthcoming RTP/SCS update (the "Regional Plan") to improve its regional GHG emission reductions, particularly to increase the locations and number of smart growth/transit-oriented developments that can further shift mode share from private vehicles to "transit" modes, and further reduce vehicle miles traveled (VMT) within the City and region. As will be addressed later in these comments, land use is a critical avoidance and mitigation measure that can be more effectively utilized by the City. As an example of how the City could improve its approach to TPAs, the Grantville project, which would appear to be designed to integrate smart growth and increased transit utilization, did not prioritize such integration. Although it and similar projects may incorporate some elements of effective TOD/smart growth, the City's land use and transportation policies and practices must be improved to ensure appropriate integration and linking with the regional transportation/circulation network (which should reflect the local governments' needs while providing the regional integration that individual local governments cannot accomplish on their own).

N-19

Page 2-7 et seq. (Strategy 1: Water and Energy Efficient Buildings). Action 1.1 should be revised to have the disclosure ordinance apply to residential and commercial buildings; to be consistent with state guidance/targets, the ordinance should require energy audits at the point-of-sale or change in ownership, energy reductions for existing homes should reduce energy use by 40% by 2020 and reach zero net energy in 50% of commercial buildings by 2035, which will further reduce GHG emissions. The City should establish appropriate energy efficiency ratings/levels for residential and commercial buildings now, which should be adjusted each year so that the 2020 and 2035 target year levels are attained. Lists of acceptable actions and measures to achieve those efficiencies should be prepared by the City, which must also have the means to monitor and enforce compliance.

N-20

Action 1.2 should include energy reductions comparable to commercial buildings (e.g., 50% reduction in energy consumption by 2035 or reach zero net energy in 50% of municipal buildings by 2035).

Also, the City should require all new residential construction to be zero net energy by 2020 and all new commercial construction to be zero net energy by 2030 (consistent with state targets).

The City should consider establishing a "GHG emissions mitigation/credit system" to allow projects that document net negative GHG emissions (that is, it will have less than zero GHG emissions) to "bank" their extra GHG emissions as credits. The system would be similar to wetland and upland mitigation banking, where a project's qualifying "extra GHG emission reductions" could be subsequently traded/sold as GHG credits to other projects in the City (essentially functioning like a cap-and-trade system within the City).

Actions 1.3, 1.4 and 1.5. The City's Water Task Force prepared a strategy that would significantly water use (reducing use by up to 35% by 2035). The CAP's three proposed actions do not appear to achieve that level of water reductions. Furthermore, other municipalities in southern California have greatly reduced their water consumption (e.g., Santa Barbara's daily average consumption is about 66 gallons/person/day, Goleta's is about 55 gpd). Melbourne, Australia (population of 4.3 million) was able to reduce its average daily consumption per person by 50% using feasible, mostly low-technology solutions. Because water transport, treatment and recycling are substantial energy demands, the City – and this CAP – must do more to reduce its water (and associated energy) demand, which would further reduce GHG emissions.

N-21

Response to Comment N-20

This comment does not address the adequacy of the Draft EIR. Comment noted. Regarding commercial building benchmarking, please see Response to Comment K-3.

Response to Comment N-21

This comment does not address the adequacy of the Draft EIR. Comment noted.

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The City should develop a water demand/use reduction program that follows the City's Water Task Force recommendation to reduce water use by 35% (or more as other southern California and arid municipalities have done), a water use tracking system, establish specific targets for 2020 and 2035 (based on lot size, building type, number of residents or workers, etc. with interim annual targets), and establish the price tiering and other specific mechanisms to reduce demand. And, the City must have a means to enforce compliance with its reduction targets.

N-21

Page 2-11 et seq. Strategy 2 (Renewable Energy) identifies three actions (2.1, 2.2, 2.3), all of which propose feasible means to achieving the goal/target of 100% renewable electric energy in the City by 2035. A Community Choice Aggregation (CCA) program for San Diego must equitably address the needs of citizens for reliable, appropriately-priced energy. The City should retain oversight of the CCA while also addressing infrastructure/operational needs of the region's primary energy provider, SDG&E. Tier-pricing must balance affordability and access to meet the "lifeline" needs of low-income/disadvantaged residents, allow for "reasonable" use by the majority of users, and include higher prices for large users. Similarly, the City could establish "average/appropriate" water use amounts for residential, commercial and industrial sectors and provide incentives for users who are below the "average" and penalties for users who are above the "average" for their respective sector.

N-22

Page 2-12 et seq. (Bicycling, Walking Transit and Land Use Strategy) establishes a goal of combined 50% mode share by 2035 in the Transit Priority Areas – much of which rests on the presumption that the City of Villages concept will be key to creating conditions to foster those mode share shifts. This is a reasonable goal. However, there are no assurances that the individual or combined mode shifts will occur. For example, the specific, necessary land use changes are not identified in or required by the CAP, but are subject to subsequent community plan update processes, which are not obligated to enact the necessary changes. That is a serious flaw in the CAP. The supporting measures/actions (pages 2-13 and 2-14) would provide incentives to improve mode share, but those are not mandatory. The City should provide clear timelines and performance measures related to implementing all the proposed actions – and describe how the City will enforce them or what alternatives it will initiate to achieve the targets.

N-23

This is a critical problem for the City's CAP that has been extensively analyzed in a recent report by Circulate San Diego and the Climate Action Campaign, who concluded that: "SANDAG's own projections show that it is mathematically impossible for the City of San Diego to achieve its transit and active transportation goals with the transportation network SANDAG is currently planning." (source: http://circulatesd.nationbuilder.com/new_climate_for_transportation, accessed 9/27/15). The City's CAP and PEIR must be revised to reflect the relationship between the Regional Plan and CAP, and additional measures added to the CAP, and additional mitigation measures included in the PEIR, to address the gap between what the CAP intends to implement and what it appears is currently feasible to implement.

N-24

Some of the proposed actions in the plan, such as "unbundling" parking costs, are fairly novel ideas and the City should initiate "demonstration" projects to test their effectiveness.

N-25

Pages 2-14 et seq. (Zero Waste) establishes clear targets for reducing the waste stream and utilizing/recapturing waste products. Where land use changes will increase the amount of available

N-26

Response to Comment N-22

This comment does not address the adequacy of the Draft EIR. Comment noted.

Response to Comment N-23

The City's adoption of the CAP cannot legally provide for specific actions to occur in a future community plan update. Regardless, the specific performance standards called for in the comment are provided in the GHG reduction targets in the CAP. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting.

Response to Comment N-24

The CAP relies on SANDAG's Regional Transportation Plan to identify the City's Transit Priority Areas. The City is setting walking, biking, and transit ridership goals that will be achieved in Transit Priority Areas through the implementation of its General Plan City of Villages Strategy and other related documents such as the Bicycle Master Plan and Pedestrian Master Plan. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting.

Response to Comment N-25

This comment does not address the adequacy of the Draft EIR. Comment noted.

Response to Comment N-26

This comment does not address the adequacy of the Draft EIR. Comment noted.

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open space (e.g., new or expanded parks, community gardens, and schools), the City should incorporate local green waste recycling opportunities as alternatives transporting clean waste to the major landfill.

N-26

Pages 2-15 (Climate Resiliency) proposes to establish realistic urban tree canopy targets (increase canopy 15% by 2020 and 35% by 2035) and identifies appropriate supporting measures that, if implemented, would substantially improve the City's urban green component – two critical actions being to hire an urban tree program manager (completed in 2015) and prepare an urban tree canopy assessment (a grant has been secured to do this). The CAP should clearly identify its urban tree canopy/urban forest priorities for additional park and open space (green) and tree planting: tree-deficient communities, underserved communities and potential connectivity to natural lands (where consistent with other conservation priorities).

N-27

Page 3A-15....3.A.22 "As noted in the General Plan PEIR, Chapter 3.8, Land Use, until all of the community plans have been updated to reflect and incorporate the City of Villages strategy, there may be conflicts between the policies contained in the older community plans and the General Plan." This raises a significant/serious problem because it will be years before the plans are modified and there are no assurances that they will be amended to comply with the CAP. The CAP (via changes to the City's General Plan and other planning processes/documents) must provide a means to ensure that the land use/density changes that are necessary to achieve the GHG reduction targets can be met and specify the time lines for those changes – which must be linked to the three time periods (Early, Mid, Long-term) as presented in the CAP.

N-28

Page 3A-9, et seq. identifies a host of Land Use policies/activities (LU-A 1-10) that are proposed to produce changes in City actions that will contribute to GHG emission reductions. While these policies/activities could yield the anticipated benefits, and as commented on in previous comments, there does not appear to be a mechanism/process to ensure that the General Plan policies/measures and community plans will be changed/modified to achieve the City of Villages' strategy and concomitant climate change/GHG reduction benefits. Nor can the City rely on the SANDAG Regional Plan to facilitate the implementation of necessary smart growth actions/funding that would put the region and City onto a GHG reduction trajectory to meet the long-term GHG emission reduction targets (and meet the City's own GHG emission reduction goals) . The City must identify and adopt implementing requirements and ensure that, overall, the City's future "smart growth" activities are being achieved: the City of Villages strategic approach, which is expected to provide effective transit priority areas are built-out to increase transit-oriented developments and improve the jobs-housing-transportation balance, can only be effective if the City's community plans align with the CAP's land use expectations and are implemented on timelines consistent with those expectations.

N-29

As proposed, and with the mitigation measures implemented, the PEIR provides a reasonable rationale that it will not have conflicts with the General Plan, community plans and regional/city conservation plans. However, and as described above and previously, substantial uncertainty exists whether and how the City will ensure that the goals of the CAP can/will be met in the absence of City's limited ability to ensure that the relevant community plans will be modified to comport with the CAP.

N-30

Page 3.B-14 et seq. The Urban Design (UD) mitigation measures address many of the concerns over retaining a sense of place – maintaining community character and visual aesthetics, open space and connectivity, improving walkability/bikability/transit access – should be included in each updated

N-31

Response to Comment N-27

This comment does not address the adequacy of the Draft EIR. Comment noted.

Response to Comment N-28

This comment does not address the adequacy of the Draft EIR. Comment noted.

Response to Comment N-29

Please see Response to Comment N-23.

Response to Comment N-30

This comment does not address the adequacy of the Draft EIR.

Response to Comment N-31

The comment appears to refer to General Plan policies that should be included in future community plans. Community plans are components of the City's General Plans, and would therefore be applicable within individual communities.

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community plan (and on a time line that conforms to the CAP time line as the CAP is being implemented). The City must be able to ensure that these policies/measures are included in each community plan (by reference or in the documents). Similarly, mitigation measures (CE) should be included in each updated community plan.

N-31

Page 3.C-1 et seq. Many of the additional CAP activities/measures that are identified in this letter would help reduce activities that contribute to air quality problems, including PM₁₀ and PM_{2.5} and ozone. A number of environmental groups have provided an expanded set of recommendations to reduce air quality contributions that should be added to/included in the CAP and DPEIR (e.g., Environmental Health Coalition and Climate Action Campaign scoping letters dates March 20, 2015; Coalition of environmental groups letter sent May 20, 2015).

N-32

Page 3.D-1 et seq (GHGs). The state deferred determination of the thresholds of significance to lead agencies, which could use modeling or other quantitative analyses when considering significance. The determination may include the extent of project GHG increases or decreases; whether the project emissions exceed lead agency thresholds; and regulations or requirements adopted to implement statewide, regional or local plans to reduce or mitigate GHGs. The City has adopted GHG emission (reduction) thresholds that align with, but would not fully meet the percentage reductions established in the state's GHG emission reduction policies/regulations as presented in AB 32, S-3-05 and B-30-15. The state's targets (using the 1990 baseline and relevant percentage reductions) are appropriate thresholds for the PEIR assessment of the CAP's potential impacts for the target years (e.g., 2020, 2030, and 2035). As noted previously, the CAP, if successfully implemented as proposed, would meet and exceed the City's target reduction as well as the state-based GHG reduction target for the City's "fair share" up to 2020. However, although the CAP would meet the City's proposed GHG reduction targets in 2030 and 2035, it would not fully meet the state-based thresholds for 2030 and 2035 (see comments for pages ES-2 and 2-1). Because the CAP is presuming to conform to the state's GHG emission reduction targets and use those as the thresholds of significance, then the DPEIR should make a finding that a Significant Effect would occur as a result of implementing the CAP – and provide additional mitigation measures. Alternatively, the CAP could be amended to include strategies and measures (some of which are recommendations in this letter) so that the proposed project/CAP avoids those impacts.

N-33

Page 3.D-20, paragraph 3 has a typographical error; the sentence should state that the CAP's target is 15% [not 25%] below the City's 2010 baseline by 2020.

N-34

Page 3.F-15. This section uses LOS (level of service) as the City's criterion for traffic/circulation effectiveness. There is considerable information regarding the increased effectiveness of using VMT (Vehicle Miles Traveled) vs. LOS as a significance criterion parameter for transportation impact. Proposals to amend CEQA law are already in the CA legislative process to require a project's impacts to be assessed using VMT rather than LOS, and the City should replace LOS with VMT as the appropriate significance measure for traffic/circulation effectiveness.

N-35

Page 3.H-1 et seq. (Water Supply, Coastal Resources, Water Resource Management). As described in prior comments, the City of San Diego should substantially reduce water consumption, following guidance provided by its Water Task Force and the examples of other cities/municipalities that face serious water supply/demand challenges. The measures in the PEIR (e.g., PF-H.1, H.2) call for optimizing use of imported water and improving reliability, improve water storage capacity and better integrating

N-36

Response to Comment N-32

Comment noted. The City will consider these recommendations as policies in the CAP are developed during implementation.

Response to Comment N-33

See Response to Comment N-6.

Response to Comment N-34

Comment noted. The text on Draft EIR page 3.D-20, paragraph 3, has been revised, as follows:

Consistent with AB 32, the CAP sets a GHG target for 2020 equivalent to ~~25~~ 15 percent below the City's 2010 baseline emissions, which is equivalent to 11.1 MMT CO₂e.

Response to Comment N-35

The California Governor's Office of Planning and Research issued a draft set of guidelines on August 6, 2014, and are in the process of developing a revised draft which will be released for additional public review. Because these guidelines are still in development at this time, they have not been incorporated into the Draft EIR for the CAP. The Draft EIR's transportation analysis relied on the City's CEQA Significance Determination Thresholds (City of San Diego, 2011).

Response to Comment N-36

This comment does not address the adequacy of the Draft EIR. Comment noted.

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local and regional and state planning. And the CAP includes proposals for some reduction in water use. However, as a number of other local governments have demonstrated (described earlier), water use can be significantly reduced to the range of 55-65 gpd while maintaining economic, social and environmental quality of life. The CAP should increase its water conservation targets, which also will contribute to lower GHG emissions.

N-36

Page 5-1 et seq. The PEIR states: "The General Plan includes proposed roadway improvements that have been designed to support the General Plan Land Use Diagram and to maintain the City's proposed level of service (LOS) standard of LOS D, where feasible and appropriate. The General Plan does not include any provisions requiring the oversizing of infrastructure facilities to serve growth not anticipated in the General Plan." As noted in prior comments, the CAP relies on the regional transportation system network (as detailed in the various SANDAG RTP/SCS and Regional Plan documents) that underutilizes smart growth/transit opportunities and does overemphasize a reliance on highways/roadways. While both the "transit-first" and "roadway first" approaches are intended to serve the same level of growth, they are not comparable approaches. The transit approach is more effective with and promotes smart growth/transit priority area planning (i.e., more efficient, less-sprawling growth). Although LOS has been a standard measure of a project's local effects on traffic/circulation, the CAP should adopt VMT as a measure of traffic/circulation effects (or use it in conjunction with LOS) because the essential measure of the CAP is how it reduces GHG emissions – for which VMT is a much better measurement parameter than is LOS.

N-37

Page 11-1 et seq. (Mitigation Monitoring and Reporting Program) The proposed MMRP addresses only those issues that were identified to have potentially significant impacts and describes specific mitigation measures to address those impacts. However, the CAP and PEIR identify a large number of strategies and measures (some specific, some fairly generic that have to be further refined) that are necessary to implement the proposed project/CAP. Additionally, as noted throughout these comments, a number of additional measures should be included/added to the proposed CAP in order to achieve certain thresholds (e.g., mitigation measures that would help the City to meet the state's 1990-baseline based GHG targets, thereby achieving the City's "fair share" contribution to those reductions).

N-38

The MMRP should be expanded to describe how each of the strategies and measures in the CAP/PEIR will be monitored and reported, and importantly how the City will respond if it determines that the measures are not being implemented or are not producing the projected (GHG-reducing) results. If the City intends to use existing or other procedures to monitor and report on all of the various measures that are identified in the CAP, then this MMRP must clearly identify who, where, how often, etc. that monitoring and reporting will occur and how it will be utilized by the City to ensure that all elements of the CAP are being effectively implemented and are producing results.

Screening Criteria

The City states the proposed screening criteria were formulated on the "gap-based" approach, which is an accepted method that has been utilized by other local governments in California. It applied historical data and information that the City has regarding past projects/GHG, and assumptions about the types and number of projects it anticipates to process through 2020. As a result, the City determined that a (discretionary) land use project that would emit less than 1,350 MT CO₂e/year would result in a less-than-cumulatively considerable (less-than-significant) GHG impact – and thus be exempt from further

N-39

Response to Comment N-37

See Response to comment N-35.

Response to Comment N-38

Comment noted. Chapter 11, Mitigation Monitoring and Reporting Program (MMRP) of the Draft EIR, identifies the required mitigation measures by resource topic that would be included in a MMRP. A separate MMRP will be prepared and adopted in accordance with CEQA Guidelines Section 15097. The CAP strategies are part of the project analyzed in the Draft EIR. Please see Response to Comment N-3 and CAP Chapter 3 regarding CAP implementation monitoring and reporting.

Response to Comment N-39

The Draft Climate Action Plan Consistency Checklist and Draft Screening Criteria for Greenhouse Gas Emissions will not be adopted as a part of the Climate Action Plan. Please see Response to Comment N-3.

LETTER

RESPONSE

Comment Letter N

GHG analysis/assessment. Specifically the City's approach would be as follows: "The first step in determining compliance would be to determine whether the project's GHG emissions level is above or below the Screening Criteria. Projects with GHG emissions below the Screening Criteria would not be considered to have a significant impact. Projects with GHG emissions above the Screening Criteria would have to complete the CAP Consistency Checklist. Projects above the Screening Criteria that could not demonstrate compliance with the CAP would be considered to have a significant GHG emissions impact. A GHG impact analysis would be needed in the project's CEQA document."

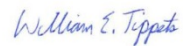
The threshold criterion of 1,350 MT CO₂e/year represents about 0.012 percent of the anticipated 11.1 MMT CO₂e annual GHG emissions for the City in 2020, which on an individual project basis is a small contribution to the total (cumulative) emissions – even though according to the Screening Criteria in Tables 5, 6 and 7 (for single use, mixed use and municipal developments) that criterion allows fairly large developments (e.g., 90-220 single development units; 1.76 million square feet parking structure) to qualify under the GHG threshold. It is unclear in the document how a project that is calculated to produce less than 1,350 MT CO₂e/year would address its GHG emissions. That is, does the City's CEQA process still require the "exempt" project to incorporate avoidance and minimization measures, as applicable, and comply with specific GHG emission reduction measures that are identified in the CAP?

The City must track and report the GHG emissions from all projects, regardless whether they are exempt from the cumulative GHG impact analysis, so that the City can demonstrate that it is appropriately implementing the CAP – or initiating actions to ensure that the CAP is achieving its targets.

While not required as part of the CAP/PEIR process, the City must soon initiate the development of its climate adaptation plan (a very preliminary version is included in Alternative B – the CMAP). When that effort is initiated/reinvigorated, please notify me of any public meetings/workshops and committees that will be responsible for preparing that document.

Thank you for considering these comments and recommendations in City's the CEQA review and the final version of the CAP.

Sincerely,



Bill Tippetts

N-39

N-40

N-41

Response to Comment N-40

Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting.

Response to Comment N-41

Comment noted.

LETTER

RESPONSE



Comment Letter O

September 25, 2015

Rebecca Malone
City of San Diego
DSDEAS@sanidiego.gov

Comments regarding the City of San Diego Climate Action Plan, SCH NO: 2015021053

To Whom It May Concern:

Green Cites California (GCC) is a network of the more progressive cities and counties in California, and a primary focus of our members is the adoption of climate action plans that will meet the needed greenhouse gas (GHG) emissions reductions targets. We seek to accelerate the adoption of best practices both in CA and throughout the United States.

I want to commend the City for a strong Climate Action Plan (CAP), a culmination of more than 5 years of extensive ccoordination and collaboration between City staff and the community. I have one recommendation that is significant in meeting GHG reduction goals. The reduction of electricity and gas consumption in existing buildings is essential. I urge the City of San Diego to adopt a **mandatory benchmarking and disclosure ordinance for commercial residential and nonresidential buildings**. This is currently underway in San Francisco, Berkeley, and Los Angeles. By so doing, the City will be able to provide recommendations to the low-performing building owners and can celebrate the best practices of building owners who have taken a leadership role. With the passage of AB 802, data access from San Diego Gas and Electric will be mandated by California. This had been one of the prominent challenges and is no longer an issue.

O-1

The City of San Diego is a member of GCC and is aware of the excellent ongoing work in CA. I would be happy to help facilitate a more in-depth exchange of information between our member cities if that would be helpful.

Thank you again for the opportunity to comment on the City of San Diego CAP.

Sincerely,

Linda Giannelli Pratt

Linda Giannelli Pratt
Managing Director, GCC

www.greencities-california.org

Berkeley • Chula Vista • Hayward • Los Angeles • Manhattan Beach • Marin County • Oakland
Palo Alto • Richmond • San Diego • San Francisco • San Jose • Santa Barbara • Santa Monica

Linda Giannelli Pratt, Managing Director LindaPrattGCC@gmail.com

Response to Comment O-1

Comment noted. Regarding commercial building energy disclosures and benchmarking, please also see Response to Comment K-3.

Comment Letter P

San Diego Unified Council of PTAs



2375 Congress Street, San Diego CA 92110-2318 • (619) 297-7821 • info@sdccouncilpta.org • www.sdccouncilpta.org

September 25, 2015

Mayor Kevin Faulconer and Councilmembers
City of San Diego
202 C St., 11th Floor
San Diego, CA 92101

RE: **Support for Climate Action Plan and 100% Renewable Energy**

Dear Mayor Faulconer and San Diego City Councilmembers,

I represent the San Diego Unified Council of PTAs with 76 PTA schools in the San Diego Unified School District and 11,000 PTA members in the City of San Diego.

The Executive Board of the San Diego Unified Council of PTAs strongly supports the Climate Action Plan draft as released by Mayor Faulconer in July 2015.

Climate change is one of the greatest threats to human existence. We as a community must act to find common sense solutions to protect public health and our quality of life for future generations. San Diego has a wealth of local, clean energy solutions, and we support the Mayor's vision of making San Diego the green energy capital of the world.

It is the role of PTA to speak for children who will bear the brunt of climate change. The San Diego Unified Council of PTAs authored a resolution ***Climate Change is a Children's Issue*** adopted by the California State PTA in May 2015 and endorsed by the San Diego Unified School District Board of Education. The resolution encourages PTAs to support legislation to substantially reduce man-made contributions to climate change and to mitigate its impact on children's health.

We urge you to act as quickly as possible to pass this strong, legally binding climate plan.

Sincerely,

Celeste Bobryk-Ozaki
President, San Diego Unified Council of PTAs

cc: San Diego Unified Council of PTAs Executive Board

Response to Comment P-1

Comment noted.

P-1

Comment Letter Q



September 28, 2015

Ms. Rebecca Malone
Associate Planner
City of San Diego Planning Department
1222 First Avenue, MS 501
San Diego, CA 92101

Sent via email: dsdeas@sandiego.gov

RE: Draft PEIR – City of San Diego Climate Action Plan

Thank you for the opportunity to comment on the Draft PEIR for the City's Climate Action Plan. SanDiego350 is a non-profit, all-volunteer, organization with over 6,000 members throughout San Diego County. We are concerned about climate change and its very real effects on our livelihoods, well-being, and the future for our children.

We commend the greenhouse gas reductions of the Climate Action Plan. These legally binding targets are in line with California's 2020 and 2050 targets, and are important precedents for other climate action plans. We support 100% clean energy by 2035, and believe Community Choice Energy is the best way to achieve this goal. It will ensure that decision-making is kept local, maximize local jobs, and be the most cost effective. We also support the language in the draft CAP for the development of a climate adaptation document. We urge you to make this a mandatory action item, to ensure the City is prepared to respond to the unavoidable impacts of climate change. Additionally, we strongly support measures to improve social and environmental equity, such as integration of affordable housing and middle-class job creation into all greenhouse gas reduction targets, increasing access to jobs and services by providing better public transportation options, and prioritizing disadvantaged communities for clean energy.

Q-1

Auto emissions account for 54% of greenhouse gasses in San Diego. To reduce those emissions, there should be stronger commitments to increase active transportation and transit infrastructure in the CAP. The City should work with SANDAG to prioritize transit options over freeway expansion. This is essential if the City is to meet and exceed the emission reduction goals of 15 percent below the 2010 baseline by 2020, 40 percent by 2030, and 50 percent by 2035. As noted in the CAP, the challenge to reduce emissions must be shared by the entire community. Therefore, we would urge putting more effort into influencing external policies that will impact the City's ability to successfully implement the CAP. Working to influence SANDAG as well as state legislators would help ensure the success of the City's efforts.

Q-2

In order to reduce the average vehicle commute, the CAP should promote transit-oriented development wherever possible. Therefore, we urge improving measures to enforce the City of Villages growth strategy. This kind of planning should be the norm in San Diego. Many of the fastest growing communities in the City are now in the process of Community Plan Updates. In order to meet the carbon emission reduction targets, the City should incorporate Climate Action Plan Goals, Targets and Actions into all community plan updates. The City of Villages growth strategy should be an enforceable part of the CAP's housing policy.

Q-3

Response to Comment Q-1

This comment does not address the adequacy of the Draft EIR. Comment noted.

Response to Comment Q-2

Comment noted. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting.

Response to Comment Q-3

Comment noted. Please see CAP Strategy 3 regarding promotion of transit-oriented development. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting. Please also see Response to Comment N-31.

LETTER

RESPONSE

Comment Letter Q

Most importantly, there should be stronger commitments and a concrete outline for implementation. Identifying the proper staffing, financing and funding needed to implement the plan and to reach the goals and targets outlined in the draft is a much-needed first step.

Q-4

Thank you for considering our recommendations as part of the public review process. SanDiego350 is a community partner in achieving these critical goals and will continue to support strides in climate change mitigation and adaptation through public education and advocacy.

Sincerely,
Joyce Lane, Public Policy Team
SanDiego350

Response to Comment Q-4

Comment noted. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting.

Comment Letter R



September 28, 2015

Rebecca Malone, Associate Planner
City of San Diego Planning Department
1222 First Avenue, MS 501
San Diego, CA 92101

RE: Comments on Draft PEIR for San Diego Climate Action Plan

PROJECT NAME: San Diego Climate Action Plan
SCH NO.: 2015021053
COMMUNITY AREA PLAN: All Community Plan Areas
COUNCIL DISTRICT: All Council Districts

Dear Ms. Malone,

I am writing to provide SolarCity's comments on the Draft Program Environmental Impact Report (PEIR) that the City of San Diego has prepared for the San Diego Climate Action Plan (CAP). Our comments focus on the proposal to adopt a Community Choice Aggregation (CCA) program to leverage the City's purchasing power for renewable sources of energy, which SolarCity strongly supports.

SolarCity is California's leading full service clean energy provider and offers cost-effective financing that enables our customers to go solar without large upfront costs. SolarCity has more than 6,000 California employees based at more than 35 facilities across the state, including more than 300 employees at our San Diego facility located at 5183 Mercury Point.

SolarCity supports the conclusions in the Draft PEIR that adopting a CCA would result in minimal negative environmental impact and instead would produce an environmental benefit by helping the City meet its greenhouse gas (GHG) emission reduction goals. As discussed in the CAP, CCAs are an effective way for communities to increase the portion of their electricity supplied by renewable energy.

According to the United States Environmental Protection Agency, many municipalities pursue CCAs to increase their reliance on renewable energy and reduce their greenhouse gas emissions above what most traditional utilities offer¹. This improvement over traditional utility service is

R-1

¹ United States Environmental Protection Agency. (Producer). (2012). *Community Choice Aggregation: Leveraging a Collective Procurement Model to Drive New Renewable Energy Generation*. [Video webinar]. Retrieved from http://www.epa.gov/greenpower/events/6mar12_webinar.htm

Response to Comment R-1

This comment does not address the adequacy of the Draft EIR. Comment noted.

Comment Letter R

crucial as local governments work to meet the state's ambitious clean energy and GHG emission reduction goals. Moreover, CCAs offer their customers electric rates that are competitive with if not lower than private utilities, and they promote consumer choice and local control².

Given these benefits, cities and counties throughout the state are exploring adopting a CCA model. San Diego would be part of a growing movement to reimagine the way its constituents purchase power. By adopting a CCA, San Diego is sending a message to renewable energy companies that the City is open for business, and that renewable energy companies should invest in creating local jobs in the region. A CCA solidifies San Diego as a cutting edge city that supports innovation and securing local job creation and investment.

Thank you for the opportunity to comment on the Draft PEIR. We look forward to continue providing clean energy to the San Diego community.

Sincerely,



Gina Goodhill Rosen
Deputy Director, Policy & Electricity Markets
SolarCity

R-1

² "What is a CCA." *Lean Energy US*. N.p., n.d. Web. 18 Sept. 2015

LETTER

RESPONSE

Comment Letter S

September 28, 2015

Ms. Rebecca Malone
Associate Planner
City of San Diego Planning Department
1222 First Avenue, MS 501
San Diego, CA 92101

PROJECT NAME: San Diego Climate Action Plan
SCH NO.: 2015021053

Dear Ms. Malone,

The Sustainable Energy Advisory Board (SEAB) for the City of San Diego convened a meeting on September 24, 2015, to formalize comments on the City of San Diego Climate Action Plan Draft EIR (CAP), the members present agreed in a 5-2-0 vote to submit the following comments.

The SEAB is proud of the City of San Diego's effort to develop a comprehensive and enforceable CAP. We fully support implementation of the plan and are pleased to have an opportunity to review it and to provide our comments.

California has become a leader and a role model for climate action because of its proactive policies to reduce greenhouse gas (GHG) emissions. Implementation of the City's CAP will provide substantial benefits such as reducing dependence on imported water and energy, diversifying energy supply, saving taxpayers money by decreasing water, energy usage and waste, achieving public health benefits, and creating "green" jobs through incentive-based policies.

San Diego's CAP is a set of strategies to be implemented by the City to support and complement actions at the state and federal level. The City's key strategies include: 1) Energy and Water Efficient Buildings, 2) Clean and Renewable Energy, 3) Bicycling, Walking, Transit & Land Use, 4) Zero Waste (Gas and Waste Management), and 5) Climate Resiliency. The specific action items with largest contribution to GHG reductions, and therefore the highest priorities, are as follows: 1) the proposed transition to 100% renewable energy on the city-wide electrical grid by 2035, 2) the increased use of mass transit by implementing the General Plan's Mobility Element and the City of Villages strategy, 3) the reduction of vehicle miles traveled through effective land use focused in Transit Priority Areas, 4) the diversion of solid waste and the capture of landfill methane, and 5) restoring green infrastructure by a robust urban forestry program. Much of the local action identified within the CAP includes partnering with other regional agencies. We encourage the City, in its partnership role, to actively advocate for the achievement of the CAP goals.

Although we agree with the strategies and associated key action items, we offer the following comments for consideration in implementation and development of supporting policies:

1. In many cases, the action items in the plan simply state that a proposal will be presented to the City Council for consideration. Although, the SEAB intends to support and offer assistance however needed, we would like to work with City staff as the specific policies

S-1

S-2

Response to Comment S-1

Comment noted.

Response to Comment S-2

This comment does not address the adequacy of the Draft EIR. Comment noted.

LETTER

RESPONSE

Comment Letter S

and ordinances are being developed. Further, we note that there is—and will be—a need to vertically integrate the CAP into current City policy and the development of the Community Plans that are underway. The success of the CAP will result from appropriate ongoing prioritization and budgeting that considers each action for cost-effective and equitable solutions to greenhouse gas emissions reductions. We are encouraged that the City is already investing in the implementation of the CAP in advance of the formal adoption by the City Council.

2. Should there be favorable results regarding the feasibility study of either Community Choice Aggregation (CCA) or an alternative plan, we propose that Action Item 2.1 be given higher priority and moved to Phase 1.
 3. Many highly energy efficient products and technologies are already available and ready for deployment. The City should regularly examine its regulatory and incentive programs to determine whether there are cost-effective opportunities to encourage adoption and speed deployment of approaches and technologies that can support the GHG reduction goals of the CAP with the support of the private sector.
 4. The state and federal regulatory environment is changing. The CAP was developed in response to AB 32 and the California Air Resources Board's (CARB) subsequent Scoping Plan, SB 1078, SB 107, SB 2, AB 758, several executive orders and other actions. However, new rules have been published or are under consideration (EPA's Clean Energy Plan, published in August of 2015, SB 350, and SB 32 to name a few). There's a need to monitor regulatory trends and to update the CAP as needed to stay current.
 5. Targets are set using a baseline of 2010; it is now near the end of 2015. Monitoring should be updated as part of an annual update to show the current state of San Diego's GHG emissions. Looking at which trajectory the City has been on since the 2010 baseline was established will help determine if current actions can ensure compliance with the long-term goals. Annual updates should also include the best available data on distributed generation and utility power acquisition mix.
 6. Energy Efficiency in Commercial and Multifamily Buildings is critical to achieving San Diego's climate goals. Including the AB 758 "Existing Buildings Energy Efficiency Action Plan" in the CAP is a step in the right direction to achieve energy efficiency in all buildings. However, Strategy 1: Water and Energy Efficient Buildings should include a commercial and multifamily energy efficiency goal, with a benchmarking and transparency ordinance. This will ensure the City is able to measure its progress towards cost-effective carbon reductions through building-level energy benchmarking, which is a recognized industry best practice.
- Including a commercial and multifamily energy savings goal demonstrates that the City understands that all buildings must be included if we want to achieve our climate action targets. Previous barriers to whole-building data access needed for successful benchmarking are addressed in the recently passed AB 802, currently awaiting the Governor's signature. This legislation was passed with broad support from local governments, the Building Owner and Managers Association of California, the US Green Building Council California, the Efficiency Council, San Diego Gas & Electric, and other key industry stakeholders.

S-2

S-3

S-4

S-5

S-6

S-7

Response to Comment S-3

This comment does not address the adequacy of the Draft EIR. Comment noted.

Response to Comment S-4

This comment does not address the adequacy of the Draft EIR. Comment noted.

Response to Comment S-5

This comment does not address the adequacy of the Draft EIR. Comment noted.

Response to Comment S-6

Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

Response to Comment S-7

Comment noted. Regarding commercial building energy disclosures and benchmarking, please also see Response to Comment K-3.

LETTER

RESPONSE

Comment Letter S

With the adoption of the AB 758 Action Plan and passage of AB 802, it is clear that commercial and multifamily buildings in San Diego will be compelled to benchmark and publicly report building energy use information in the coming years.

These state level legislative directives only add to the rising need for the CAP to outline a local ordinance for commercial energy transparency and goals that best fits the unique needs of San Diego, while also meeting statewide energy efficiency goals. This is an opportunity for San Diego to show its leadership on climate issues and benefit from resources for local governments to meet these targets. Aligned local action will ensure that this legislation will be done in the best interest of San Diego stakeholders.

7. Moving forward, the City should adopt a broader definition of the green economy for the CAP that includes a more complete description of the full spectrum of opportunities and commitment to local equitable growth. In addition, there is a need to ensure committed equity in allocation of resources so that communities of concern are able to participate and realize benefits of energy efficiency, renewable energy installations, urban forestry, public health benefits, and job creation, without carrying undue burden of cost.

Once methods for assessing job creation are agreed, targets should be set and progress tracked for each community planning area. According to the Bureau of Labor statistics, jobs in research and development, manufacturing and distribution, installation, and maintenance of products or services in any of the following categories could be considered "green jobs:"

- Energy from renewable sources – electricity, heat, or fuel generated from wind, biomass, solar, ocean, hydropower, biomass, landfill gas, and municipal solid waste;
- Products and services that improve energy efficiency such as energy efficient equipment, appliances, buildings and vehicles, as well as products and services that improve the energy efficiency of buildings and efficiency of energy storage and distribution such as smart grid technologies. Cogeneration is included in this category;
- Products that reduce or eliminate the creation or release of pollutants or toxic compounds, remove pollutants or hazardous waste from the environment, reduce greenhouse gas emissions, reduce or eliminate creation of waste materials, or collect, reuse, remanufacture, recycle, or compost waste materials or wastewater;
- Natural resource conservation, including products and services related to organic agriculture and sustainable forestry, land management, soil water or wildlife conservation, and stormwater management; and
- Environmental compliance, education and training, and public awareness-products and services that enforce environmental regulations, provide education and training related to green technologies and practices, or increase public awareness of environmental issues.

The CAP establishes the requirements for future policy with regard to greenhouse gas emissions targets. We request that the City clearly identify the methods, metrics, and milestones for green jobs and include numeric commitment targets for these jobs and economic development over the life of the plan. Monitoring and enforcing the economic

S-7

S-8

S-9

Response to Comment S-8

This comment does not address the adequacy of the Draft EIR. Comment noted.

Response to Comment S-9

This comment does not address the adequacy of the Draft EIR. Comment noted.

LETTER

RESPONSE

Comment Letter S

development metrics and milestones should be included in regular updates to the Mayor, City Council, and the community.

S-9

8. We encourage the Mayor and City Council to provide separate budget lines for the CAP as part of the budgeting cycle for each department. Regular updates should be made to assure that policy goals are on track and that implementation is being accomplished in the most cost-effective way. The Sustainability Program Manager should have adequate resources and be empowered to move forward with budgeted items.

S-10

9. Adaptation to effects of climate change that can no longer be avoided. The CAP acknowledges that a comprehensive plan for adaptation to the unavoidable effects of climate change should be developed. We agree with this priority. It should include public health issues, biodiversity, coastal resources, water, agriculture, forestry, transportation, and energy.

An urban tree planting program is the only specific tactic mentioned in the CAP for adaptation to unavoidable climate change effects – the SEAB is supportive of this goal. Appropriate installation of the urban forestry measures proposed as adaptation measures needs to include safeguards that do not interfere with the potential for rooftop and parking lot solar energy installation. Installation guidelines need to be coordinated to achieve the maximum benefits of each measure – shade, carbon absorption, and electric generation. PV installations, by creating shade, can significantly reduce heating loads on buildings and parking areas as well as contribute to the charging infrastructure for expansion of electric vehicles.

S-11

The Sustainable Energy Advisory Board is grateful for the opportunity to provide comments on the City of San Diego's CAP. We expect to be engaged throughout the development of future policy and in the implementing and monitoring of those policies that align to the CAP.

If you or any members of your staff have questions on this, please do not hesitate to contact us.

Sincerely,

John Bumgarner
Chairman
City of San Diego Sustainable Energy Advisory Board

Cc: Kevin Faulconer, Mayor
San Diego City Council
Mike Hansen, Director of Land Use & Environmental Policy, Office of Mayor Faulconer
Brian Schoenfish, Senior Planner, Planning Department
Cody Hooven, Sustainability Manager, Economic Development Department

Response to Comment S-10

This comment does not address the adequacy of the Draft EIR. Comment noted.

Response to Comment S-11

This comment does not address the adequacy of the Draft EIR. Comment noted.

LETTER

RESPONSE

Comment Letter T

From: [Erika Morgan](#)
To: [DSD EAS](#)
Subject: Fwd: Comments regarding San Diego Climate Action Plan, SCH NO: 2015021053
Date: Monday, September 28, 2015 7:19:00 PM

Attention: Rebecca Malone

Dear Ms. Malone,

I wish to join many other residents of San Diego in supporting a strong Climate Action Plan (CAP). As a new resident (2011) of District 3 in Little Italy, I have been drawn to stay in San Diego by the quality of both the climate AND the City's visible track record of "doing its homework" on important issues affecting the City's future. Unlike other cities in which I have lived, San Diego takes its responsibilities to future residents seriously. As a result, I feel optimistic about investing my future in this City, *because* I see evidence that San Diego IS trying to remain a livable and hospitable City into the future.

Accordingly, I'd like to make the following statements about the draft Climate Action Plan:

+ It is vital that this Plan stay strong -- As it is finalized, there must be no changes to the current actions, measurable objectives AND/OR to the "teeth" it contains, to achieve and enforce realization of those objectives. Under no circumstances should this Plan be weakened or "watered down" in any way. I define "Watered down" as any reductions to the emissions savings targets or to the mechanisms of enforcement.

T-1

+ Maintain the Transportation Targets -- As transportation emissions are over 50% of the City's current climate emissions, reducing those must remain the most central focus and strongest commitment. I fully support Strategy 3, all parts. As a resident *who has been car-free in Little Italy for four years*, I can attest that San Diego's trolley-bus-transit system is currently strong. However, despite coordination between buses and trolleys, accessible bus schedules, and decent coverage to many areas of the city, there are still many, many gaps. Finalizing the current transit and walking objectives (3.1 - 3.3) will trigger additional efforts to improve the overall system. This will bring economic and livability-improvements, as well as reductions in climate emissions. These targets must be maintained, even if SANDAG's related measures are less aggressive and therefore in conflict.

T-2

+ Maintain the Clean Energy Targets -- Objective 2.1 is essential, however the implementation deadline should be moved forward to 2020, not 2035. CCA formation begins with passage of a City ordinance, which could be done in 2016. As has been shown by Lancaster Choice Energy, the newest CCA, implementation of clean electricity choice can begin within the following year. There is no reason to delay capture of these CCA-based economic and emissions benefits to 2035.

T-3

+ Climate Resiliency -- Objective 5.1 is a laudable step toward increased City climate resiliency, but it addresses only a fragment of the "resiliency" needed. All municipal buildings within the expected sea- and flood-level rise areas projected by 2035 should be assessed within the time frame of this plan for the nature of each building's resiliency strategy. By 2035, will that building face foundational water damage and/or greater destruction? Or will it have been replaced by then - and if so, what will be the prudent design

T-4

Response to Comment T-1

This comment does not address the adequacy of the Draft EIR. Comment noted.

Response to Comment T-2

This comment does not address the adequacy of the Draft EIR. Comment noted.

Response to Comment T-3

This comment does not address the adequacy of the Draft EIR. Comment noted.

Response to Comment T-4

This comment does not address the adequacy of the Draft EIR. Comment noted.

LETTER

RESPONSE

Comment Letter T

standards for the successor building(s)? The Plan contains no measures that deal with the resiliency of the built environment, an oversight, in my opinion.

↑ T-4

Overall, I find the draft San Diego City Climate Action Plan to be fully supportable in its current form. I urge that the Council vote to accept the Plan and to support its full implementation.

I applaud the efforts of the Planning department to develop this draft, and offer thanks to all staff who have worked long and hard to bring it to and through this level of public review and understanding.

T-5

If there are any questions on my comments, need for clarification or elaboration, please do not hesitate to contact me at the contact points below. Best wishes,

Erika Morgan
Energetic Management Associates
[Linkedin.com/in/erikamorganema](https://www.linkedin.com/in/erikamorganema)
energeticmgmt@gmail.com
[207-607-0707](tel:207-607-0707)
[619-894-6707](tel:619-894-6707)

Response to Comment T-5

Comment noted.

LETTER

RESPONSE

Comment Letter U

September 28, 2015

Rebecca Malone, Associate Planner
City of San Diego Planning Department,
1222 First Avenue, MS 501
San Diego, CA 92101
Via email: DSDEAS@sanidago.gov

PROJECT: San Diego Climate Action Plan
SCH NO.: 2015021053

Dear Ms. Malone,

The City of San Diego Environmental and Economic Sustainability Task Force (EESTF) was established by the City Council in October 2010 as an independent advisory body to work with City staff on the development of the Climate Action Plan.

As such, the EESTF is pleased to offer support for the Climate Action Plan Draft EIR with consideration for the following comments:

1. **Strategy 1, Energy & Water Efficiency Buildings, Action 1.1 (Residential Buildings) and New Action for Commercial Buildings.** The EESTF notes that reductions in overall energy consumption affect the magnitude of other measures; prioritizing efficiency first would align to the statewide California's Loading Order for Electricity Resources and makes other aspects of the CAP feasible, such as such as the 100% renewable energy goal.

The EESTF believes residential disclosure alone will not be adequate to meet the goals in the CAP. Consideration should be given for energy use benchmarking and public disclosure for private projects including commercial and multi-family residential (as had been proposed in a prior draft of the CAP), as managing energy use effectively starts with measuring and knowing what the options are, and commercial and multifamily buildings are large users of energy and represent the cost-effective, low-hanging fruit for efficiency and conservation. If greenhouse gas emission goals are not met, as documented in annual CAP reports, then retrofit mandates should be considered as future action to meet the emission reductions targets for Strategy 1, Action 1.1.

Education and outreach should be a part of the disclosure process, including information on available funding and financing programs. Publicly disclosing the summarized scores would allow the City to assess if energy programs are having the desired results and where to most effectively allocate outreach and monetary resources. For example, the City could target funding towards the least efficient multifamily housing and other building types service low-income residents.

The California Energy Commission has made clear in its Existing Buildings Energy Efficiency Action Plan (2015) it is looking for local governments to play a leading role and it intends to make funding available for such efforts. The City of San Diego would be wise to take advantage of these funds and be in control of its energy efficiency future in a way that best suits San Diego.

Additionally, there may be a discrepancy with the appendix and the target for Action 1.1. The July 2015 CAP includes the following for Strategy 1.1 "Reduce energy use by 15% per unit in 20% of residential housing units by 2020 and 50% of units by 2035;" whereas Appendix B, Table 3 has slightly different values for percentage of units participating in the disclosure ordinance. Table 3 also

U-1

U-2

Response to Comment U-1

Comment noted. Regarding commercial building energy disclosures and benchmarking, please also see Response to Comment K-3.

Response to Comment U-2

Please see Chapter 2, Project Description, in the Final EIR. The Project Description has been revised to reflect current GHG emissions reductions modeling and methodology. These changes reflect the revisions to the CAP and CAP Appendix A.

LETTER

RESPONSE

Comment Letter U

City of San Diego EESTF
Comments on the City of the Climate Action Plan, July 2015 Draft
September 28, 2015
Page 2 of 4

highlights a potential significant discrepancy in the percentage of units that are targeted to participate in "Efficiency Activities."

EESTF asserts that the greenhouse gas emission reduction target should not be lowered as the targets for Strategy 1.1 are reconciled. Please explain how the methods will be corrected to meet the target.

2. **Strategy 1, Energy & Water Efficiency Buildings, Actions 1.1-1.5.** The EESTF would like to see the water use reduction strategies that have been implemented across the City in response to the mandated water use reductions become permanent elements of the Climate Action Plan.

3. **CEQA streamlining Checklist and Thresholds should be strengthened to be consistent with the CAP and General Plan.** As the purpose of CAP Appendix A, Climate Action Plan Consistency Checklist is to allow exceptionally environmentally sustainable projects to have streamlined review of the greenhouse gas portion of CEQA; the checklist should require the projects actually be exceptionally environmentally sustainable.

First, the Land Use and Transportation Checklist Part 1 should make being located in a Transit Priority Area a threshold question. This emphasis on dense, transit-oriented development is necessary to reduce Vehicle Miles Travelled (VMTs) that are so critical to achieving the overall GHG goals.

Second, the Energy and Water criteria in Checklist Part 2, Question 1 should minimally use 15% better than State Title 24, Section 6 standards, rather than "average". However, it would be more appropriate to require Net Zero Energy, as the City's General Plan Policy CE-A5 calls for all new development and major redevelopment to be net zero energy consumption by 2020 for residential and 2030 for commercial construction.

Further, Question 2 in Part 2 water efficiency and conservation targets should be strengthened, given that San Diego is facing drought as the new normal of living, and the City's Water Task Force recommends reducing water use by 35% or more. In addition, EESTF requests that the City make permanent the current, temporary drought conservation measures, as a supporting measure in Strategy 1.

4. **The CAP should reflect minimum standards of new state regulations including SB 350 (2015, de Leon) AB 802 (2015, Williams).** While these pieces of legislation have not (at the writing of this letter) been signed into law by the Governor. The legislative intent is clear—coupled with the AB 758 Action Plan that has been released by the state in August 2015—that existing building will be subject to energy disclosure and retrofit.

The following additional comments shall be considered as the Climate Action Plan is implemented to ensure the intent of the CAP is maintained and tracked throughout its life:

5. **Strategy 1, Energy & Water Efficiency Buildings and Strategy 3 (Transportation and Land Use), new supporting measure.** Develop a community planning tool and checklist to align to CAP for review with the EIR. Following from the approach developed by the Pacific Beach Planning Committee as it relates to the Pacific Beach EcoDistrict (referenced in the CAP) a tool shall be

U-2

U-3

U-4

U-5

U-6

Response to Comment U-3

This comment does not address the adequacy of the Draft EIR. Comment noted.

Response to Comment U-4

Please see Response to Comment N-3.

Response to Comment U-5

The CAP assumes 50 percent of electricity will be provided by renewable energy by 2030 which is consistent with SB350.

AB 802 effectively replaces AB 1103. Reductions in the CAP are assumed based on AB 1103, with the expectation that AB 802 will achieve similar or greater reductions, and not less. The details and programs for AB802 have not yet been developed. As stated in the CAP (page 29), "improvements in energy technology and efficiency, transportation technology and fuels, building standards, consumer behavior, and future federal and state regulations may warrant re-visiting the actions over time." Please also see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

Calculations were developed in July 2015 under current regulations. Due to the necessity to complete the calculations and finalize the document, any regulatory/legislative changes that occurred after calculations were completed will be included in future CAP updates. To date, regulatory changes that occurred in the latter half of 2015 are anticipated to increase greenhouse gas reductions, which would contribute an even greater amount to the anticipated reductions under the CAP.

Response to Comment U-6

Comment noted. Also, please see Response to Comment N-3.

LETTER

RESPONSE

Comment Letter U

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Comments on the City of the Climate Action Plan, July 2015 Draft
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developed to vertically integrate the screening criteria to the development of community plans. This is a critical tool for implementing the CAP and ensuring San Diego promotes transit-oriented development that is affordable and helps people commute to work, school, and other necessities.

6. Integrate prioritization criteria presented in Chapter 4 throughout CAP and to inform implementation plan. The EESTF acknowledges that not all measures will be implemented City-wide concurrently—target funding for communities of concern as described in the Social Equity and Job Creation Chapter.
7. Identify strategy and action items that have a longer development lead time to ensure that deadlines can be met. Action on the development of the Community Choice Aggregation or alternative plan should be considered a long-lead item and included in Phase 1 of the CAP.
8. The EESTF recommend the development of a detailed first-year implementation plan and budget. Staff should develop a detailed 12-month action plan that identifies specific measures, metrics and milestones that can be used to report on CAP progress, as well as the associated budget necessary, to ensure this plan has the resources to get put into action.
9. EESTF sees ongoing support and funding as a critical component of the CAP. Full integration into the department budgeting process will ensure successful, ongoing support of the Climate Action Plan.
10. The EESTF recommends the development of a public stakeholder advisory committee for implementation oversight.
11. Adaptation Plan to be Phase 1 priority with schedule and budget with oversight by stakeholder advisory group. Since the drafting of the original Plan the need for adaptation has become more pronounced and preparing now could avoid future costs, yet the current draft contains no formal commitment to completing an adaptation plan. The final CAP should make a hard commitment to this

U-6

U-7

U-8

U-9

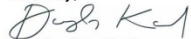
U-10

U-11

U-12

The Environmental and Economic Sustainability Task Force (EESTF) was established by the City Council in October 2010 as an independent advisory body to work with City staff on the development of the Climate Action Plan. We are grateful for the opportunity to provide comments on the draft July 2015 Draft CAP and EIR. If you have questions on this, please do not hesitate to contact me.

Sincerely,



Douglas Kot, Chair
City of San Diego, Economic and Environmental Sustainability Task Force

Economic and Environmental Sustainability Task Force Members

Douglas Kot, Chair, District 3
Diane Coombs, District 1

Response to Comment U-7

This comment does not address the adequacy of the Draft EIR. Comment noted.

Response to Comment U-8

Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

Response to Comment U-9

This comment does not address the adequacy of the Draft EIR. Comment noted. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

Response to Comment U-10

This comment does not address the adequacy of the Draft EIR. Comment noted.

Response to Comment U-11

This comment does not address the adequacy of the Draft EIR. Comment noted. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

Response to Comment U-12

This comment does not address the adequacy of the Draft EIR. Comment noted.

LETTER

RESPONSE

Comment Letter U

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Kristen Victor, District 2
Nicola Hedge, District 4
Doug Smith, District 5
Bill Powers, District 6
Kayla Race, District 8
D. Bart Chadwick, Mayor's Office

Cc: Kevin Faulconer, Mayor
Council President Sherri Lightner and Councilmembers
Mike Hansen, Director of Land Use & Environmental Policy, Office of Mayor Faulconer
Brian Schoenfisch, Senior Planner, Planning Department
Cody Hooven, Sustainability Manager, Economic Development Department

LETTER

RESPONSE

Comment Letter V

From: [Dorothy Gesick](#)
To: [DSD EAS](#)
Subject: Comments re: SD Climate Action Plan SCH NO 2015021053
Date: Tuesday, September 29, 2015 8:16:58 AM

Attention : Rebecca Malone
I urge the City of SD to adopt a strong Climate Action Plan.

Dorothy Gesick
3720 Louisiana Street

I V-1

Response to Comment V-1

This comment does not address the adequacy of the Draft EIR. Comment noted.

LETTER

RESPONSE

Comment Letter W

From: [Catheryn Mullinger](#)
To: [DSD EAS](#)
Subject: Comments regarding San Diego Climate Action Plan, SCH NO: 2015021053
Date: Tuesday, September 29, 2015 10:08:16 AM

Attention: Rebecca Malone

I urge the City of San Diego to adopt a strong Climate Action Plan. We (and the world) have lost decades of precious time deferring action until there's no time left to save the basis of a quality life for ANY of us. The effort to achieve 100% clean energy by 2035 offers the potential of good-paying local jobs for the residents of San Diego, and in the process we can make our homes and community green, health, and efficient. We must create safe, clean, convenient, and affordable public transit, while also creating walkable, bikeable, and safe neighborhoods for ALL---part of this effort MUST be to give attention to those communities that have been most overburdened by air pollution, transportation inequity, and climate impacts.

Please don't be diverted from DOING THE RIGHT THING by powerful special interest groups who, honestly, in the long run will thank you...their futures and those of their children and grandchildren depend on our taking action NOW.

Thank you,
Catheryn Mullinger

W-1

Response to Comment W-1

This comment does not address the adequacy of the Draft EIR. Comment noted.

LETTER

RESPONSE

Comment Letter X

From: [Avrin, William](#)
To: [DSD EAS](#)
Subject: Comments regarding San Diego Climate Action Plan, SCH NO: 201502105
Date: Tuesday, September 29, 2015 10:34:11 AM

Attention: Rebecca Malone

I urge the City of San Diego to adopt a strong Climate Action Plan that achieves 100% renewable energy by 2035. Such a plan will promote good green jobs, insulate our region's economy from fluctuating fossil fuel prices, improve air quality and make the city a more attractive destination for the tourism that is such a big part of our city's economy.

The Climate Action Plan must encourage energy-efficient homes, make public transit a truly viable alternative to freeways, and make it easier and safer for people to walk and bike. It must also increase investment in poorer communities, who suffer the most from air pollution and lack of accessible transportation.

Sincerely,

William F. Avrin, Ph.D.

9598 Carroll Canyon Road #165
San Diego, CA 92126
858-549-9431
619-602-5898 (Mobile)

X-1

Response to Comment X-1

This comment does not address the adequacy of the Draft EIR. Comment noted.

LETTER

RESPONSE

Comment Letter Y

Rebecca Malone, Associate Planner
City of San Diego Planning Department
1222 First Avenue, MS 501
San Diego, CA 92101

September 29, 2105

Via email: DSDEAS@sandiego.gov

Re: San Diego Climate Action Plan Draft PEIR Comments – Project 2015021053

Dear Ms. Malone,

Please accept these comments on the City of San Diego's Climate Action Plan (CAP) Draft Programmatic Environmental Impact Report (PEIR), on behalf of Climate Action Campaign (CAC). CAC is a watchdog organization dedicated to stopping climate change and protecting San Diego's quality of life.

We support the CAP's legally-binding greenhouse gas reduction targets— 15% below the baseline by 2020 and 49% by 2035. In committing to and meeting these targets, the City will be doing its part in helping the state meet its 2020, 2030, and 2050 targets and be a leading example of addressing climate change regionally, statewide, and nationally. While the most recent science suggests these goals may be insufficient to fully combat climate change, we agree these targets are an appropriate starting point for this first iteration of the City's CAP.

We also fully support the CAP's groundbreaking and necessary goals, including for 2035:

- 100% clean energy citywide
- 50% of commutes by transit, walking, and biking in priority areas
- 2 mile reduction in average vehicle commute distance
- 90% reduction in waste
- 35% urban tree canopy

Achieving these goals will not only help protect and preserve our future, but will also improve our quality of life and health today and drive technical and economic innovation and entrepreneurship to find climate solutions. These strategies will ensure San Diego is prepared to meet the needs of a 21st century economy and emerging workforce that wants clean air, clean energy and bicycling, walking, and transit as real and preferable transportation methods.

Our review of the draft PEIR, CAP, and technical appendices shows some additional and amended actions are needed to ensure the City and its residents are able to fully meet the CAP's goals. Our recommendations can be summarized as the following:

1. Develop Budget and Year-1 Work Plan
2. Develop CAP Consistency Checklists for Community Plans
3. Strengthen CAP Consistency Checklist for CEQA Streamlining Review
4. Regional Transportation Planning and Funding—Leverage City Position at SANDAG
5. Plan for Adaptation to Climate Change
6. Integrate Language on Social Equity into Goals, Targets and Actions in Chapter 3

Y-1

Y-2

Response to Comment Y-1

This comment does not address the adequacy of the Draft EIR. Comment noted. Please see Response to Comment N-3 regarding the CAP Consistency Checklist.

Response to Comment Y-2

Comment noted.

LETTER

RESPONSE

Comment Letter Y

We offer more detail on these six recommendations in our comments below.

1. Develop Budget and Year-1 Work Plan

Critical to ensure the Climate Action Plan results in tangible change and achieves real greenhouse gas reductions is allocating the proper funding. Developing an accurate budget may require creating more detailed work plan for the first year or two of implementation, which could be a companion document to the CAP to be presented shortly following the plan's adoption.

Budgeting needs in the CAP's first year should include, but are not limited to:

- Infrastructure and programs needed to implement the Bike and Pedestrian Master Plans. The share of transportation funds should minimally match the CAP's mode-share goals and be adjusted upward as necessary to achieve of the goals. We also support prioritizing these funds in disadvantaged areas identified by CalEnviroScreen.
- Clean Energy and Efficiency Installation on City-owned properties.
- Community Choice Aggregation Validation Study.
- Tree planting sufficient to implement the Urban Forest Management Plan and meet 2020 goals.
- Consultant and/or staffing for developing an Adaptation Plan.
- Sufficient staff funding to move the Zero Waste program forward to meet 2020 goals.
- Relevant City staff time and associated expenditures, including the Sustainability Manager, Urban Forest Manager, staff of the Departments of Transportation and Stormwater, Environmental Services, and Planning to implement and monitor CAP compliance.

Y-3

2. Develop CAP Consistency Checklists for Community Plans

Community Plans are a key tool for implementing the CAP—in governing whether our urban neighborhoods will be compact and transit-oriented, help people live close to where they work, provide safe pathways for pedestrians and bicyclists, are affordable to a diversity of incomes, have trees and parks to reduce heat and use energy and water wisely. In fact, the Mayor regularly touts Community Plan Updates as the key strategy for implementing City of Villages and CAP goals.

As multiple Community Plan Updates are currently in development, we are concerned the CAP includes no requirements or guidance for how these Updates should comply with and help achieve the CAP's goals. This must be a key priority before any new plans are adopted by Council. This is also important given the potential impacts the PEIR identifies to Land Use, Neighborhood Character, and Transportation and Circulation. The City must develop a CAP Consistency Checklist for Community Plans—a concept similar to the CAP Consistency Checklist for CEQA streamlining (Appendix A). Success metrics should include reduction of VMTs and improvement of air quality, rather than traditional Level of Service (LOS) as proposed in the PEIR (p3.F-15).

Y-4

3. Strengthen CAP Consistency Checklist for CEQA Streamlining Review

We support the purpose of CAP Appendix A, Climate Action Plan Consistency Checklist—to allow exceptionally environmentally sustainable projects to have faster review of the GHG portion of

Y-5

Response to Comment Y-3

Comment noted. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

Response to Comment Y-4

Please see Response to Comment N-3 regarding the CAP Consistency Checklist.

Response to Comment Y-5

Please see Response to Comment N-3 regarding the CAP Consistency Checklist.

LETTER

RESPONSE

Comment Letter Y

CEQA. However, the proposed requirements for fast-tracking projects, which were not publicly available during the Scoping period, appear very low and could hinder the CAP's and General Plan's goals. We offer the following recommendations to improve this apparent discrepancy.

Y-5

First, we believe Land Use and Transportation Checklist Part 1, Question 2 (whether a project is in a Transit Priority Area) should be a threshold, deal-breaker question, regardless of how energy or water efficient the project is. While some development may need to occur outside of Transit Priority Areas, it is essential to the CAP and reducing VMTs that the City prioritize development within those areas; development outside of those areas should not have the privilege of CEQA streamlining. A key metric in evaluating projects should be VMT reduction, rather than using LOS as proposed in the PEIR (p3.F-15). We cannot afford more sprawl development.

Y-6

Second, we believe the Energy and Water criteria in Checklist Part 2 needs to be improved. Question 1's requirement that projects be 15% below "average" energy use is too low. State Title 24, Section 6 standards would be a more appropriate benchmark than "average". Even more appropriately, the Checklist should require Net Zero Energy. The City's General Plan Policy CE-A5 calls for all new development and major redevelopment to be net zero energy consumption by 2020 for residential and 2030 for commercial construction. We do not believe anything less than what the General Plan requires should not be given the privilege of CEQA streamlining.

Y-7

Further, Question 2 in Part 2 allows projects using 5% less water than average to be streamlined. With the new normal of living with drought, the City must do far more to conserve water for future generations. In addition to requiring far more efficient use of water in the Checklist, the City should also take other actions necessary to achieve State Water Board guidelines and the City's Water Task Force recommendation to reduce water use by 35% or more, such as codifying the current temporary drought conservation measures as permanent and establishing more specific targets, with a means to enforce. This should be included as a supporting measure in CAP Strategy 1.

Y-8

Finally, Checklist Part 3 should be eliminated; any project not meeting the Checklist Part 1 criteria should not have the privilege of CEQA streamlining and should undergo full CEQA review. We additionally ask the final CAP and PEIR to clarify how actions and projects after 2020 will be processed under CEQA, with regards to using the CAP and checklist for tiering.

Y-9

4. Region Transportation Planning and Funding—Leverage City Position at SANDAG

We fully support the CAP's groundbreaking and necessary goals for shifting the way people get to work—with 50% of commuters in Transit Priority Areas taking transit, walking, and biking by 2035. We believe this target to be achievable with the appropriate City and SANDAG expenditures, actions, and project and policy approvals. But, therein lies the challenge. As the City is part of a regional transportation network whose funding and planning is largely governed by SANDAG, it is essential the City work proactively to ensure SANDAG's plans support the CAP. Currently, that is not the case. CAC recently published a report¹ with Circulate San Diego using SANDAG's data to show the underinvestment and deprioritization of transit, walking, and biking in the draft Regional Transportation Plan undermines the City's ability to achieve CAP goals. SANDAG projects its

Y-10

¹ http://circulatesd.nationbuilder.com/new_climate_for_transportation

Response to Comment Y-6

Please see Response to Comment N-3 regarding the CAP Consistency Checklist. **Response to Comment Y-7**

Please see Response to Comment N-3 regarding the CAP Consistency Checklist.

Response to Comment Y-8

Please see Response to Comment N-3 regarding the CAP Consistency Checklist.

Response to Comment Y-9

Please see Response to Comment N-3 regarding the CAP Consistency Checklist.

Response to Comment Y-10

Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

LETTER

RESPONSE

Comment Letter Y

Regional Plan would put the City's Transit Priority Areas on a path to reach only 15% alternative transportation by 2035. That's even lower than the CAP's 2020 goal of 21%.

This is a significant hurdle the City must and can do more to address. Luckily, there is a solution. The City has two seats on the SANDAG board and can control 40% of the votes. While that's not all of the votes needed to decide any one outcome, the City has the influence needed to improve the Region's plans.

5. Plan for Adaptation to Climate Change in Stand-Alone Document by 2017

We support language in the CAP acknowledging the need for development of a stand-alone climate adaptation document. This should be a mandatory action item in Phase 1. The City has a critical need to assess the risks to the City's infrastructure, public health, safety, and natural resources, especially for sensitive and disadvantaged populations, and prioritize limited resources where they are most needed to reduce vulnerability and enhance capacity to adapt. Acting now will also reduce future costs. The Coastal Commission agrees, highlighting in its recently adopted Sea Level Rise guidance document: "The third National Climate Assessment notes that there is strong evidence showing that the cost of doing nothing to prepare for the impacts of sea level rise exceeds the costs associated with adapting to them by about 4 to 10 times (Moser et al. 2014)."

6. Integrate Language on Social Equity into Goals, Targets and Actions in Chapter 3

We support the City in having a special focus on ensuring disadvantaged communities benefit from this plan and are prepared to adapt to climate change. We support the goal in Chapter 4, Social Equity and Job Creation, to "Prioritize programs and actions to reduce emissions in disadvantaged communities that rank in the top 25 percent of CalEnviroScreen's ranking for San Diego region communities." (p51). We also join many stakeholders in recommending this goal be integrated throughout the strategies in Chapter 3, so it is not forgotten. This could help address air quality impacts the DEIR identifies for sensitive receptors. City staff informed us such prioritization may currently be done as an informal practice. Formalizing this prioritization by integrating it into the CAP would help keep the City accountable and transparent to the public in future years.

Thank you for the opportunity to submit these comments. With our recommendations included, we are eager to work with the City in moving forward with adopting and fully implementing this groundbreaking plan.

Sincerely,



Nicole Capretz
Executive Director



Kayla Race
Director of Operations and Programs

Y-10

Y-11

Y-12

Response to Comment Y-11

This comment does not address the adequacy of the Draft EIR. Comment noted.

Response to Comment Y-12

This comment does not address the adequacy of the Draft EIR. Comment noted.

LETTER

RESPONSE

Comment Letter Z

From: [Carlos Cabezud](#)
To: [DSD EAS](#)
Subject: Climate Action Plan
Date: Tuesday, September 29, 2015 10:43:04 AM

To whom it may concern:

I am writing to urge you, very strongly to:

1. Support the CAP designed to reduce our overall carbon footprint in half by 2035;
2. Support local control of our energy future using Community Choice Energy;
3. Improve measures to enforce the City of Villages growth strategy;
4. Make stronger commitments to increase active transportation and transit infrastructure;
5. Come up with a concrete, precise outline for implementation; and
6. Make stronger commitments to future-proofing San Diego and ensuring the city is prepared for a much hotter, drier future with rising seas.

Z-1

I believe this is extremely important for the future of San Diego and for the kind of world we will leave behind for our children.

Sincerely,

Carlos F. Cabezud

Response to Comment Z-1

Comment noted.

Comment Letter AA



September 29, 2015

Rebecca Malone
Associate Planner
City of San Diego Planning Department
1222 First Avenue, MS 501
San Diego, CA 92101

Re: San Diego Climate Action Plan, Project No. 2015021053: Comments To Draft Program Environmental Impact Report

Dear Ms. Malone:

The San Diego Gas & Electric Company (SDG&E) is pleased to provide the following comments on the draft Program Environmental Impact Report (PEIR) on the City of San Diego's draft Climate Action Plan (CAP).

The following comments are being provided consistent with CEQA guidelines, "to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences.... in light of what is reasonably feasible." To the extent these comments address energy components of the Climate Action Plan; they are focused on the analysis and assumptions underlying these components of the Climate Action Plan and are applicable without regard to how energy procurement is or may be conducted in the future. SDG&E supports customer choice, and nothing herein is intended to take any position on the merits of Community Choice Aggregation or any other potential alternatives that may become available to customers.

"Providing a roadmap to achieve GHG reductions"

1. The Climate Action Plan and the PEIR contain insufficient data to corroborate the carbon reduction estimate of approximately 2,603,944 MT CO₂e in carbon reduction from "Community Choice Aggregation or a Similar Program" by 2035. Neither the Climate Action Plan nor the PEIR includes *energy use* estimates and projections which are necessary to calculate and replicate the GHG reduction estimates that are the goals of the Climate Action Plan. The accuracy of the Estimated GHG Reduction Potential of Local Strategies in Table 3.1 of the Climate Action Plan (page 30), and repeated in Table 2-3 of the PEIR (page 2-16), cannot be established by the data provided in both documents and their appendices. The Climate Action Plan and the PEIR are

AA-1

Response to Comment AA-1

CAP Appendix A has been updated to include a more detailed methodology for how the GHG reduction from implementation of a CCA or another program was determined. Please see specifically CAP Appendix pages A-5 through A-10 for the methodology for CCA or another program. Greater detail has been provided for the forecasted GHG reductions for all of the CAP Actions.

Comment Letter AA

predicated upon the clear and correct GHG reduction targets. It is imperative that the math behind this target, and all other actions that impact electric usage, be transparent and readily available in order to provide a reliable Climate Action Plan roadmap for evaluation by San Diego's decision makers.

AA-1

2. In *Strategy 2.1: Clean and Renewable Energy*, neither the Climate Action Plan nor the PEIR appropriately separate the GHG reductions that would be achieved by State mandates alone in the absence of a Climate Action Plan, from those that are attributed to a "Community Choice Aggregator or a Similar Program" by 2035.

This is a critical data point that will enable decision makers to assess the City's actionable GHG reduction targets that correspond to a 100 percent renewable goal. The roadmap must have a correct GHG reduction target. Without clear identification of this actionable target, decision makers cannot properly plan nor assess the environmental effectiveness, costs, and social equity of the strategies, actions, and supporting measures to achieve the remaining actionable percentage of GHG carbon reductions after deducting reductions that will happen *on their own* under State mandates without action by the City.

As presented in the Climate Action Plan and PEIR, the GHG reductions listed as part of *Strategy 2.1: Clean and Renewable Energy* overstate the actual GHG reductions that would occur from a "Community Choice Aggregation Program or Another Program" and understate carbon reductions from State mandates by 2035. *Strategy 2.1: Clean and Renewable Energy* of Table 3.1 states that "Community Choice Aggregation Program or Another Program" will result in an approximate 2.6 million MT CO₂e reduction by 2035. The GHG reductions attributed to "Community Choice Aggregation Program or Another Program" were determined by calculating the difference between the 2010 GHG baseline and zero GHG emissions associated with 100 percent renewable power, assuming the amount of energy that will be served under this program.¹ This calculation fails to account for much higher renewable content required under State mandates than that included in the 2010 baseline.

AA-2

The Climate Action Plan recognizes both the current 33 percent renewable portfolio standard (RPS) and the State's most recent direction to increase this percentage.² Senate Bill 350 recently approved by the Legislature would require 50 percent renewables by 2030. The Climate Action Plan assumes that the portfolio of those not choosing "Community Choice Aggregation Program or Another Program" for energy will be at least 60 percent renewable and assigns that corresponding GHG reduction to the California RPS. The Climate Action Plan states that extrapolating SDG&E's current renewable supply trend in complying with the state's renewable mandates would yield a renewable content of about 67%.³ Yet, the GHG reduction from this

¹ The method used to calculate this value is explained in page B-25 of the Appendices.

² See page 21 for baseline RP assumption.

³ See Appendices page B-6.

Response to Comment AA-2

Comment noted. Revisions to the CAP and CAP Appendix A separate out the emissions reductions associated with Community Choice Aggregation or another program that are attributable to the statewide Renewable Portfolio Standard. This change decreased the amount of reductions achieved at the local level, and increased the amount at the State level—the overall level of reductions remained the same.

Comment Letter AA

State RPS program is not deducted in the calculation for the energy associated with "Community Choice Aggregation Program or Another Program." The GHG intensity of City residents not choosing the "Community Choice Aggregation Program or Another Program" would be that of the SDG&E resource portfolio - approximately 262 lbs./MWhr.⁴ Thus, the GHG reductions achieved from moving from the 2010 baseline to 67% renewables in 2035, including GHG reductions from State mandates, would result in about 1.7 million MT CO₂e in reductions, or about 65 percent of the entire reduction, attributable to State mandates. This 1.7 million MT CO₂e is erroneously attributed to "Community Choice Aggregation Program or Another Program" in the Climate Action Plan and the PEIR.

This portion of GHG reduction should be removed from the "Community Choice Aggregation Program or Another Program" line and moved to the State policy section in Table 3.1 of the Climate Action Plan and in the corresponding tables of the PEIR. This correction does not change the total reductions in the Climate Action Plan; it just correctly identifies the driving factor for these GHG reductions. Once corrected, this leaves 35 percent of the total (uncorroborated) 2.6 million MT CO₂e in GHG reductions in *Strategy 2.1: Clean and Renewable Energy* for City decision makers to consider achieving under "Community Choice Aggregation Program or Another Program."

3. The 100 percent renewable level is untested in the PEIR. A major element of the Climate Action Plan is to achieve an energy supply with near zero GHG emissions. This is a noble, bold, but untested strategy in terms of both cost and maintaining electric system reliability that the residents of San Diego have grown accustomed to and will continue to expect in the future. The City does not operate its own electrical grid and will be relying on the California Independent System Operator (CAISO) to balance supply and demand. The City needs to consider that not only them but other parties, including every electric supplier in the state, will be increasing the use of renewables to meet state mandates at a minimum. The Climate Action Plan assumes that the City can buy any mix of large-scale renewables that it wants, including using Renewable Energy Credits, and as long as at the end of the year the total renewable energy production equals total energy city use, then the Climate Action Plan has achieved its goal.

This is far from achieving the goal stated on page 35 of the Climate Action Plan: "Achieving 100% renewable energy on the city-wide grid by 2035." In fact, whether buying actual large-scale renewable power, relying on new local distributed renewable power, or relying on virtual renewable power through RECs from any location (there is no stated limit that the City's purchases have to be in California), the Climate Action Plan would necessarily rely on the use of local natural gas-fired power

⁴ See Appendices page B-24 for the assumption regarding SDG&E's portfolio in meeting the state's RPS mandate. The intensity was calculated assuming the non-renewable power was natural gas with an emission rate of 810 lbs./MWh.

Response to Comment AA-3

See Response to Comment AA-2. All GHG reductions attributable to State actions have been categorized as such in the CAP and the FEIR.

Response to Comment AA-4

As specified in the CAP, on page 35, the City will "[c]omplete a citywide Community Choice Aggregation Feasibility Study" as part of the implementation strategy for Action 2.1, which will consider these issues. Calculations are based on reasonable assumptions. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

Comment Letter AA

plants to maintain grid stability, especially at peak usage hours in the evenings. Battery storage, deployed in unprecedented quantities and at great costs relative to natural gas-fired power plants, is a possible alternative. SDG&E is a leader in the deployment of battery storage and earlier this year achieved an unprecedented task, powering an entire community, Borrego Springs, for nine hours on renewable power and batteries alone. Neither the feasibility nor the grid impacts of new large-scale renewables projects and of small-scale renewable projects are analyzed in the PEIR. Neither peak natural gas requirements nor peak battery storage requirements needed to maintain the grid and reliable electric service when renewables are naturally unavailable are addressed in the PEIR.

Natural gas is needed to provide grid reliability, as more and more intermittent renewable resources are integrated into the system. In just the last five years, natural gas has enabled SDG&E to increase the amount of renewable energy in its portfolio by more than 20 percent -- from 11 percent in 2010 to 33 percent today. In that same time period, SDG&E has eliminated coal and nuclear as contracted energy sources from its portfolio. Natural gas electric generation will remain an important resource for ensuring reliability for the San Diego region and beyond, even as more and more renewable resources and energy storage solutions are integrated. The PEIR does not address the necessary interaction of renewables and natural gas or the operational and environmental effects of this interaction. While the vast majority of the rest of the nation grapples with weaning itself off coal and transitioning to natural gas, SDG&E has no contracts for coal-based power and has pioneered the use of natural gas to support increasing percentages of renewables in its energy mix. A discussion on natural gas is a necessary part of a credible energy roadmap.

The PEIR also does not address "the potential contribution of a large-scale pumped storage project toward meeting the City's renewable energy needs" mentioned in the Climate Action Plan (page 24). This potential "multi-year renewable energy project at the San Vicente Reservoir" would be in partnership with the San Diego County Water Authority. Under state law, large-scale hydroelectric pumped storage projects are not eligible for the renewable portfolio standard (Renewables Portfolio Standard Eligibility Commission Guidebook, California Energy Commission, May 2012, pages 19-28). Moreover, pumped storage uses water and gravity to store and dispatch energy. It does not generate energy, renewable or otherwise. Pumped storage relies on purchased energy to pump water from one basin to another in order to exploit price arbitrage opportunities in the pricing of electricity at different times of day. The carbon content of a pumped storage project's electricity is that of the energy used to pump water into a storage basin. State law notwithstanding, the purchased electricity to pump water into a storage basin would have to be 100 percent renewable for such a project to be considered a renewable storage project.

AA-4

AA-5

AA-6

Response to Comment AA-5

Natural gas is not a 100 percent renewable energy source, and thus, was not included specifically in the CAP strategies. CAP Appendix A includes natural gas, as it is an energy source currently in use.

Response to Comment AA-6

The CAP's reference to the "potential contribution of a large-scaled pumped storage project toward meeting the City's renewable energy needs" is in a list of examples of the "Growing Presence of Renewable Energy in San Diego." It describes a partnership between the City and the San Diego County Water Authority to conduct an in-depth study of the feasibility of a multi-year renewable energy project at San Vicente Reservoir. The CAP does not include any reductions attributable to this reference.

Comment Letter AA

At this point, neither the Climate Action Plan nor the PEIR have provided a roadmap or analyzed the feasibility of a roadmap to achieve 100 percent renewables. That roadmap to examine the feasibility of 100 percent renewables should use the same definition of renewables that is used for the State RPS so that a consistent standard is employed to measure incremental GHG emission reductions from the 2010 baseline that would occur under current and prospective state law and mandates.

AA-7

“Conform to California Laws and Regulations”

The Regulatory Sections of the PEIR do not account for Senate Bill 350 (DeLeon), the Clean Energy and Pollution Reduction Act of 2015. On September 11 of this year, the Legislature approved SB 350, which sets a 50 percent renewable requirement for retail sellers of electricity, set a goal to double the amount of energy efficiency savings in the state and mandates a review of energy efficiency rebates and incentives to achieve the goal, and states Legislative intent to support electric charging and natural gas infrastructure. This bill and several active applications at the California Public Utilities Commission are likely to change the amount of carbon reductions in both the electric sector, the natural gas sector, and the transportation sector that will result from state mandates. The carbon reduction and costs to achieve *Strategy 1: Water & Energy Efficiency in Buildings*, for example, are very likely to be affected by the mandated review and potential changes to rebates and incentives ordered by the California Energy Commission and the CPUC. Although the timing of SB 350 and ongoing and expected regulatory proceedings at the CPUC complicate inclusion in the PEIR, there is no doubt that these issues will affect, and potentially reduce significantly, the carbon reduction targets of the City beyond state mandates.

AA-8

The CMAP Alternative

The PEIR provides an “Alternatives” analysis within Chapter 8 (pages 8-1 to 8-14). This analysis compares the Project (Climate Action Plan) to both the No Project alternative and a previously developed plan that was not adopted, namely the 2012 Climate Mitigation and Adaptation Plan (CMAP).

The CMAP was the initial GHG reduction plan considered by the City that provided policy direction and identified actions that the City and community could take to reduce GHG emissions consistent with AB 32. The City released a draft of the CMAP in August, 2012, but the plan was never adopted. This Alternative would adopt and implement the 2012 Draft CMAP instead of the CAP. The CMAP Alternative establishes a planning horizon of 2013-2035 and includes the following: quantifies GHG emissions from community-at-large and City operations; establishes reduction targets for 2020, 2035 and 2050; identifies strategies and measures to reduce GHG levels, focusing on those that the City has authority to implement; and provides guidance for monitoring progress on an annual basis. In addition, the CMAP Alternative highlights climate change vulnerabilities, adaptation strategies, and recommendations for further research. The CMAP Alternative, similar to the proposed Project, focuses on four categories of GHG sources and associated reduction strategies:

AA-9

Response to Comment AA-7

The purpose of the CAP is to assess the policies and actions needed to reduce emissions to meet specified targets. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

Response to Comment AA-8

Recent changes to legislation either remain consistent with current GHG estimates in the CAP or are anticipated to generate additional reductions. The CAP calculations assume a 50 percent level of renewable energy for 2030, consistent with SB 350. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting. Please also see Response to Comment U-5.

Response to Comment AA-9

The Draft EIR has been revised to reflect that the CMAP Alternative is the environmentally superior alternative in that it would eliminate or reduce the severity of impacts related to the implementation of large-scale renewable energy projects. The commenter is correct that local GHG emissions achieved under the CAP would be lower than those in the CMAP Alternative, but that overall reductions in the CAP would be greater than those shown in the CMAP because additional state and federal reductions are included in the CAP. The lower locally-achieved actions are due to rapidly changing federal and state regulatory environment. Where state and federal programs result in certain greenhouse gas emissions reductions, implementation of certain local measures become obsolete.

Comment Letter AA

The PEIR notes that “the CMAP Alternative would implement local programs that would achieve a projected reduction of about 1.6 million MT of CO₂e below business as usual by 2020, and about 3.3 million MT by 2035.... However, the CAP projects much higher reductions from State and federal programs, such that the overall GHG reduction by 2035 is substantially higher than projected in the CMAP.” The PEIR concludes:

“[there is] little difference in severity of impacts between the Project and the alternatives. The No Project Alternative would have an additional significant impact related to GHGs, since it would not implement the policies regarding reduction of GHGs contained in the General Plan. The CMAP Alternative would have somewhat reduced impacts related to land use, but would not be as effective as the CAP in reducing GHG emissions.”

This last statement appears to be the result of the fact that State and federal GHG mandates that will result in future GHG reductions within the City were never incorporated into the CMAP. In any case the PEIR concludes that the Climate Action Plan is the environmentally superior alternative because both the No Project alternative and the CMAP alternative would have greater impacts related to GHGs than the proposed Climate Action Plan. The table below (which was not provided in the PEIR) indicates that the conclusion of the environmental superiority of the Climate Action Plan seems to be based on only one criteria – inclusion of future projected GHG reductions attributable to both state and federal programs. It is clear that the CMAP alternative would result in more substantial local GHG reductions by 2020 and comparable local GHG reductions by 2035.

Projected GHG Reductions Resulting from Local Strategies – PEIR Alternatives

Plan	Projected Local GHG Reductions (below baseline) by 2020 Target Year	Projected Local GHG Reductions (below baseline) by 2035 Target Year
CMAP	1.6 million MT CO ₂ e	3.3 million MT CO ₂ e
CAP	0.4 million MT CO ₂ e	3.5 million MT CO ₂ e

The CMAP Alternative and Cost-Effectiveness

Many of the associated costs for the CMAP alternatives are known. Appendix III of the CMAP – Cost Effectiveness Methodology Documentation - provides cost-effectiveness estimates for the proposed Electric, Natural Gas and Transportation measures outlined within the plan. The expected costs for each measure analyzed are represented in 2010 dollars per metric ton of carbon dioxide equivalent (\$2010/MT CO₂e). Table 1 in Appendix III provides, at a glance, a high-level comparative analysis of those GHG reduction measures proposed in the CMAP that are most and least cost effective. This same level of cost effectiveness analysis is absent for the Climate Action Plan and the PEIR.

AA-9

AA-10

Response to Comment AA-10

This comment does not address the adequacy of the Draft EIR. Regarding the CMAP Alternative more generally, please see Response to Comment AA-9.

Comment Letter AA

It is precisely the type of analysis that should be completed for all of the Climate Action Plan's proposed local GHG reduction measures (e.g., Strategies 1 through 5) to provide the City and its taxpaying residents with a clear, concise, and readily understandable map outlining the relative cost-effectiveness of each proposed strategy. The cost-effectiveness analysis would also provide a more rigorous baseline for determining the actual superiority of the Climate Action Plan relative to the No Project and CMAP alternatives, as outlined in the PEIR.

SDG&E strongly encourages the City of San Diego to complete a detailed analysis of the expected costs (in 2015 dollars) for each of the proposed local GHG reduction strategies prior to adopting the Climate Action Plan. The City has repeatedly stated that the Climate Action Plan, if adopted, will be reviewed annually without specifying what that review may include or what parameters it would be based upon. A thorough cost-effectiveness analysis, when completed, would provide a logical framework for annual review of each of the local GHG reduction strategies and their overall effectiveness in achieving the GHG reduction objectives outlined within the Climate Action Plan. The City has provided exactly this type of financial analysis with previous plans, so it is concerning that nothing has been provided to date for the Climate Action Plan.

Transportation Alternatives

The Transportation Strategy focuses on reducing emissions by reducing vehicle miles traveled (VMT) through multimodal transportation options, and by decreasing the energy intensity per miles travel by reducing idling and increasing electric vehicle use by improving the electric vehicle infrastructure.

In addition to its support for electric vehicles, SDG&E strongly believes that natural gas is a critical component of equitable and sustainable energy and climate action policies. Unfortunately, the PEIR does not include the role and benefits of natural gas in the transportation sector. Contrary to the discussion in the PEIR, natural gas is not just used for "generating electricity" and "heating homes and businesses" (Draft EIR page 3.G-7). Natural gas is relied upon every day by residents and businesses throughout the City of San Diego to cook food, heat water, operate fleets (e.g., transit buses, school buses, refuse trucks), do laundry, and for space heating. San Diego's leading institutions – the military, universities and colleges, hospitals, hotels, restaurants, and leading manufacturers – depend on natural gas for their energy needs. Unfortunately, both the draft Climate Action Plan and the PEIR fail to consider the vital role of natural gas in San Diego and the well documented potential environmental benefits of natural gas, particularly with respect to electric generation to reliably meet daily peak usage and in reducing emissions from petroleum-based heavy-duty transportation.

AA-10

AA-11

Response to Comment AA-11

See Response to Comment AA-5.

Comment Letter AA

Transportation accounts for nearly 44 percent of the region's GHG emissions, 88 percent of the region's SMOG, and 96 percent of the region's diesel particulate matter emissions.⁵ Between the U.S.-Mexico border, the Port, the region's freeways, and a growing population, there can be no real "climate action" in the transportation sector without focusing on substituting natural gas for petroleum as a fuel source. Natural gas has 20 percent fewer emissions than diesel and 30 percent fewer GHG emissions than gasoline.⁶ As noted by SANDAG, "[t]he state's 2050 vision for heavy-duty vehicles foresees CNG, LNG, propane, biodiesel and hybrid technologies with the greatest potential for displacing petroleum-based fuels and improving efficiency."⁷

Without question, natural gas can be used to displace petroleum-based fuels to reduce air quality impacts and reduce GHG emissions. The draft Climate Action Plan and PEIR fail to consider natural gas as a transportation alternative and as a fundamental energy source for San Diego.

The Environmental Justice Alternative

Although the PEIR identifies an Environmental Justice Alternative, it is eliminated from further analysis in part because some actions, such as the development of transit and other alternative transportation modes specifically to service environmental justice communities "are not under the jurisdiction of the City" and the Environmental Justice Alternative is "not substantially different from the CAP" (Draft EIR page 8-3). SDG&E agrees that the City does not have jurisdiction to implement many of the actions that would most effectively address climate change in a way that protects and benefits environmental justice communities, including low income communities and communities of color. But without analyzing the costs and benefits of the draft Climate Action Plan, the City cannot and should not assume that every citizen – including especially environmental justice communities – would not be adversely impacted.

SDG&E Description Update

The Introduction and Environmental Setting (1-11) and Utilities (3.G-7) sections of the PEIR contains outdated information on SDG&E. Today, SDG&E has 3.4 million consumers that are served through 1.4 million electric meters and 870,000 gas meters. The PEIR states, "SDG&E produces electricity primarily at the Cabrillo (Encina) and South Bay Power Plants." The South Bay Power Plant, formerly owned by the Port of San Diego and operated by Dynegy, was retired from service on December 31, 2010, and imploded on February 2, 2013. The natural gas-fired Encina Power Station is owned by NRG Energy. It is not owned by SDG&E, therefore SDG&E does not produce power at that facility. SDG&E purchases electricity from the natural gas-fired Otay Mesa Energy Center owned by Calpine. SDG&E owns and operates the Palomar Energy Center in Escondido.

⁵ California Air Resources Board (CARB), California GHG Emissions Inventory 2000-2012, released May 2014; CARB, 2013 Almanac; CARB, California Toxic Inventory 2010 (<http://www.arb.ca.gov/toxics/cti/cti.htm>).

⁶ California Energy Commission, US Department of Energy.

⁷ SANDAG Regional Energy Strategy, page 96.

Response to Comment AA-12

As stated in Section 8, Alternatives, in addition to the lack of jurisdiction over transit projects, the environmental justice alternative was not selected because actions to improve conditions in environmental justice communities are already included in the General Plan, Housing Element, and CAP.

Response to Comment AA-13

The following text changes have been made:

"SDG&E purchases raw energy supplies from various suppliers located outside of the city and transports those energy sources to local plants for processing. SDG&E purchases electricity from the Otay Mesa Energy Center, owned by Calpine, and SDG&E owns and operates the Palomar Energy Center in Escondido. SDG&E produces electricity at the Cabrillo (Encina) and South Bay Power Plants, as well other smaller power plants in the San Diego area. Once the energy is processed, it is sent to customers via SDG&E's system of transmission lines." (Introduction, page 1-11)

"...Gas and Electric Substations and Transmission Lines, identifies some of SDG&E's facilities within the City. SDG&E produces electricity primarily at the Cabrillo (Encina) and South Bay Power Plants, as well other smaller power plants SDG&E purchases electricity from the Otay Mesa Energy Center, owned by Calpine, and SDG&E owns and operates the Palomar Energy Center in Escondido, which is then sent to customers through various transmission lines." (Section 3.G Utilities, Page 3.G-7)

LETTER

RESPONSE

Comment Letter AA

SDG&E looks forward to helping the City of San Diego develop its Climate Action Plan and achieve San Diego's environmental goals in the most effective and cost-effective way possible.

Thank you,



R. Scott Pearson
Director
Environmental Services

LETTER

RESPONSE

Comment Letter AB

From: [Colleen Dietzel](#)
To: [DSD EAS](#)
Subject: Comments regarding San Diego Climate Action Plan, SCH NO: 2015021053
Date: Tuesday, September 29, 2015 1:46:18 PM

Attention: Rebecca Malone,

I urge the City of San Diego to adopt a strong, legally binding Climate Action Plan that achieves 100% renewable energy by 2035 and prioritizes clean energy jobs, public transit options and energy efficiency measures in urban, impacted neighborhoods.
Thanks for your consideration on this urgent matter.

AB-1

Colleen Dietzel
4423 Brighton Ave.
San Diego, California 92107
619-225-1083

Response to Comment AB-1

Comment noted.



CHAIRMAN
David Poole
Brookfield Residential

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Lennar Homes

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Mike Mahoney
ConAm

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ChelSea Investment Corp.

PRESIDENT & C.E.O.
Borre Winckel

AFFILIATES
California Building
Industry Association

National Association
of Home Builders

Comment Letter AC

September 29, 2015

Rebecca Malone
Associate Planner
City of San Diego
202 C Street
San Diego, CA 92101

RE: Building Industry Association of San Diego County response to the
DRAFT Climate Action Plan.

Dear Rebecca,

The Building Industry Association of San Diego County is comprised of 700 member companies and a workforce of over 60,000 men and women. We have reviewed the Draft Climate Action Plan and offer the following comments and recommendations.

The California home building industry has been doing its part to reduce Green House Gas emissions by creating the most efficient homes in the nation – if not the world. A recent study of energy efficiency by *ConSol*, a Stockton-based energy-consulting firm, shows just how well new homes perform. The *ConSol* analysis, backed by data from the *California Air Resources Board* and the *California Energy Commission*, reveals how the use of increasingly efficient components and systems as well as improved design and construction has produced California homes that far out-distance any others in the nation when it comes to energy savings.

As a result, today's newly constructed California homes have a "carbon footprint" that is already 25% smaller than those built in 1990. That means substantially less impact on the environment and substantial energy savings. When compared with the national code used in most states, California's energy code is approximately 50% more stringent with additional requirements set to take effect in 2017. *Consider that if all homes in the U.S. were built like those today in California, the country would be compliant with the much-heralded Kyoto global-warming protocol of 1998.*

AC-1

Building Industry Association of San Diego County
9201 Spectrum Center Blvd., Suite 110, San Diego, CA 92123-1407
P 858-450-1221 F 858-552-1445 www.biasandiego.org

Response to Comment AC-1

This comment does not address the adequacy of the Draft EIR. Comment noted.

LETTER

RESPONSE

Comment Letter AC

New homes make up only one-half of one percent of San Diego's total housing stock. In fact San Diego is home to 600,000 houses built *prior* to the establishment of stringent state energy regulations. Upgrading an existing home is over nine times more cost effective than trying to squeeze more energy savings from an already efficient newly built home.

The city's best option of addressing GHG emissions is to improve the existing housing stock. *For example, a \$5,000 investment in energy improvements reduces GHG emissions by 33% in existing homes.* The state also recognizes the value of improving existing housing stock with the passage of Senate Bill 350 that mandates a 50% reduction in energy use in existing buildings by 2030.

Any specific design requirements included as part of the implementation of the City's Climate Action Plan should be fully vetted by knowledgeable professionals in the building industry to eliminate any requirements that are redundant with existing requirements promulgated by the State, such as those included in the *California Building Energy Efficiency Standards (Title 24, Part 6)* and the *California Green Building Standards Code (Title 24, Part 11)*. Redundancies may at first appear to be of only secondary concern, but additional regulations that add an unnecessary layer of time and attention to the extensive bureaucratic process already in place will increase costs and therefore reduce the affordability of housing even more.

For example, the 2013 residential energy efficiency standards (Title-24) are already well over 20% more rigorous than the 2008 standards, which became building code in 2010. These standards are recognized by all California jurisdictions as the correct method for defining the energy efficiency of any building, regardless of its size or number of bedrooms.

The 'Consistency Checklist' in Appendix A of the CAP references an arbitrary 7,101 kWh/yr per unit and requires that projects demonstrate a 15% or 25% reduction from that. This measure is not consistent with already existing Title-24 code, and is actually incorrect because it does not take into consideration the size of the building like Title-24 does.

Therefore, the 7,101 kWh measure is oversimplified because it does not reflect actual design parameters like building size, and adds a layer of unnecessary regulation that Title-24 already addresses.

Clarification is requested on portions of the CAP Consistency Checklist listed on pages 5 – 11 in the Appendices:

Checklist Part 1: Is the proposed project consistent with the existing land use designations in the General Plan, the applicable Community Plan, the Bicycle Master Plan, and the Municipal Code? (emphasis added)

AC-1

AC-2

AC-3

Response to Comment AC-2

This comment does not address the adequacy of the Draft EIR. Comment noted.

Response to Comment AC-3

Please see Response to Comment N-3.

Comment Letter AC

Concern arises in the area of Community Plan consistency whereby a submitted project in a yet to be updated community plan may be in keeping with the intent of the CAP in terms of density and TOD but may be negatively impacted due to its inconsistency with outdated community plan. We recognize that the city is aggressively pursuing community plan updates and request that some accommodation be made for projects that could fall into the aforementioned circumstance.

Checklist Part 2: Does the residential project reduce energy use by 15% below average residential energy consumption value per unit? (emphasis added)

As stated in previous text, new homes are far more energy efficient than existing housing stock created prior to 1990. The lion's share of energy savings is best achieved through upgrades to existing housing stock rather than additional energy restriction on the .5% of new energy efficient homes. Is the 2010 baseline of 7,101 kWh/yr per unit reflective of both new and existing housing stock or is it exclusive to new home construction? Since energy use is predominately determined by the number of occupants which vary from unit to unit, what matrix is used to determine the energy efficiency of units?

Checklist Part 2: Waste Diversion: Does the project achieve 75% waste diversion? (emphasis added)

Does the 75% diversion requirement apply to construction and demolition waste or does it apply to the project occupants once completed and if so, how is this to be determined and monitored? Also, diversion requirements in Checklist Part 3 mandates a 91% waste diversion for the entire project. How and why was a 91% mandate determined?

Checklist Part 3: Tree Canopy: Does the project site achieve 25% urban tree canopy cover trees? (emphasis added).

Please define the area which is subject to the 25% tree canopy requirement. Is it 25% of the development footprint or landscaping? It is determined by the ultimate growth of the tree or at the time of planting. Also, please explain the inherent conflict between the water reduction requirement and the requirement to provide a greater tree canopy ratio which requires water.

These comments are not meant to be exhaustive, but rather, examples of some of our more noteworthy concerns resulting from our review. In conclusion, while we support and applaud all reasonable and cost effective means to care for the San Diego environment and promote sustainable communities, we are most concerned with avoiding costly and ineffective means that result in undue burdens on the building industry and new home buyers. San Diego is home to some of the highest home prices in the nation and according

AC-3

AC-4

Response to Comment AC-4

Comment noted. Please also see Response to Comment N-3.

LETTER

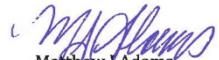
RESPONSE

Comment Letter AC

to a study by *Point Loma Nazarene University*, the city's regulatory process is responsible for over 47% of new home construction costs. ↑ AC-4

We ask that you strive to strike a reasonable balance during the fine-tuning of the Climate Action Plan. We look forward to your consideration of our comments and to our continuing participation in the CAP refinement process.

Sincerely,


Matthew J. Adams
Vice President

brc:mja

Comment Letter AD



2727 HOOVER AVE., SUITE 202 • NATIONAL CITY, CA 91950 • (619) 474-0220 • WWW.ENVIRONMENTALHEALTH.ORG

Rebecca Malone, Associate Planner
City of San Diego Planning Department
1222 First Ave, MS 501
San Diego, CA 92101
Via email: DSDEAS@sanidiego.gov

September 29, 2015

Re: San Diego Climate Action Plan Draft PEIR

Dear Ms. Malone,

Thank you for the opportunity to provide input on the City of San Diego's Climate Action Plan (CAP) Draft Programmatic Environmental Impact Report (PEIR). Since our founding in 1980, Environmental Health Coalition (EHC) has been committed to fighting toxic pollution and protecting San Diego's health, environment, and quality of life. Climate change threatens all San Diegans' right to live in healthy and resilient communities, but it impacts some neighborhoods more than others. **The City should act now to reduce carbon pollution and address the disproportionate risks faced by the most impacted neighborhoods. The City should protect and invest first in neighborhoods impacted first by climate change.**

While we support the legally binding greenhouse gas reduction targets and most top-line goals in the draft Climate Action Plan through 2035, our analysis of the July 2015 Draft CAP Draft PEIR finds the CAP does not utilize all feasible measures to mitigate the significant impacts identified in the DEIR, impacts including:

- Transportation and land use strategies allowing toxic air quality in disadvantaged communities;
- Large scale energy facilities resulting in impacts to air quality, water resources, visual and neighborhood character and incompatibility with General Plan policies to "use small, decentralized, and appropriately-sited energy efficient power" (CE-I.12) and "maximize energy efficiency" (CE-I.2); (the CAP's energy disclosure strategy only achieves 5% of the energy conservation target); and
- Incompatibility with General Plan policies to "protect public health, safety and welfare equitably and address the needs of the disenfranchised" (LU-I.3) and "prioritize and allocate citywide resources to provide public facilities and services ...where greater needs exist." (LU-I.4).

Additional measures and changes are needed to fully mitigate the impacts that could result from the plan and ensure compliance with state laws, the City's General Plan, and City Council Resolution R-2015-68. Our comments offer recommendations for additional mitigation measures in the following major areas:

1. **Transportation and Land Use:** Prioritize disadvantaged neighborhoods first and strengthen commitment to implementing active transportation infrastructure, regional transit investment, and affordable, transit-oriented housing with buffers. While we support the goal in CAP Chapter 4, Social Equity and Job Creation, to "Prioritize programs and actions to reduce emissions in disadvantaged communities that rank in the top 25 percent of CalEnviroScreen's ranking for San Diego region communities," this goal should not be isolated to Chapter 4. It should be fully integrated throughout the programs and actions described in Chapter 3, to improve transparency and clarity.

AD-1

EMPOWERING PEOPLE. ORGANIZING COMMUNITIES. ACHIEVING JUSTICE.
EMPODERANDO A LA GENTE. ORGANIZANDO A LAS COMUNIDADES. LOGRANDO LA JUSTICIA.

Response to Comment AD-1

This comment does not address the adequacy of the Draft EIR. Comment noted.

LETTER

RESPONSE

Comment Letter AD

2. Energy efficiency and renewable energy: Require energy efficiency standards that maximize reduction of energy use in existing and new buildings, particularly to benefit low-income rental units, and prioritize local, in-basin renewable energy resources in disadvantaged neighborhoods. Efficiency requirements may be met through participation in a state, federal, or utility funded energy efficiency programs. The City must facilitate greatly increased participation in order to meet the CAP's efficiency goals. Additionally, the CAP should give greater weight and enforceability to the comment for Action 2.1, which says "Efforts should be local in nature to benefit local renewable energy business, create jobs, and increase resiliency for the City" (CAP Chapter 3, p.35) and these local efforts should include both local solar PV and mandatory energy efficiency and conservation.

AD-2

Citywide actions necessitate a system for prioritizing implementation and utilizing limited resources in an orderly, transparent, and effective way. We presume the City does not have the resources to immediately implement and achieve the entirety of citywide measures such as investment in pedestrian and bicycling facilities to achieve 7% walking commutes and 18% biking commutes. The City must find somewhere to start in working towards those goals. We suggest the starting place be environmental justice communities who rank in the top 25% of regional CalEnviroScreen scores and are also within transit priority areas.

AD-3

EHC recommended these concepts as an "Environmental Justice Alternative" in our Scoping Comments. We urge the City to integrate these recommendations in the final PEIR and Climate Action Plan, in order to avoid many of the significant impacts the DEIR states are "unavoidable" and in order to ensure the Climate Action Plan is equitable, comprehensive, and enforceable and that San Diego's working families can be resilient in a changing climate.

AD-4

Response to Comment AD-2

Comment noted. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

Response to Comment AD-3

This comment does not address the adequacy of the Draft EIR. Comment noted. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

Response to Comment AD-4

The purpose of the CAP is to provide a roadmap to achieve specified GHG reductions. Strategies in the CAP would involve activities to reduce energy consumption, increase renewable energy generation, reduce vehicle use and vehicle miles traveled, increase alternative fuel vehicle use, and increase solid waste vehicle fuel efficiency. These activities would have a beneficial effect on air quality by reducing the use of sources of air pollution and improving ambient air quality citywide, which is inclusive of the environmental justice communities. Please also see Draft EIR Section 8.C. Also, the Environmental Justice Alternative would not include any features that would reduce the significance of the impacts that would result from implementation of the CAP.

Comment Letter AD**CAP ENVIRONMENTAL JUSTICE ALTERNATIVE SCENARIO RECOMMENDATION**
RECOMMENDED MODIFICATIONS TO JULY 2014 DRAFT**STRATEGY 1: ENERGY AND WATER EFFICIENT BUILDING**

Action 1.1 (Efficiency in Existing Homes): Present to City Council for consideration a residential Energy Conservation and Disclosure Ordinance that requires:

- ✓ All homes disclose energy use and benchmarking scores. Reports to homeowners should include cost and benefit analysis of efficiency options and available incentives and financing options.
- ✓ Inefficient homes implement efficiency improvements within a set period of time, such as through participation in a federal, state, or utility funded energy efficiency program.

Ordinance may be phased in by buildings size, age, energy use, or energy performance, and requirements may be triggered at specific dates, at points of transaction, or at other major events for buildings.

Supporting Measure (Financing) (p35): Pursue additional financial resources and incentives, including but not limited to funds from the California Greenhouse Gas Reduction Fund, ratepayer funds via a Regional Energy Network or SDG&E Local Government Partnership, and U.S. Housing and Urban Development and Department of Energy grants, for local programs to assist low and moderate income households and businesses with implementing energy and water efficiency measures identified by the conservation and disclosure ordinances, and to promote the expansion of greywater systems.

Target 1.3 Reduce energy consumption at municipal facilities by 15% by 2020 and an additional 50% by 2035.

Action 1.3 (Efficiency in Municipal Buildings): Present to City Council for consideration a Municipal Energy Strategy and Implementation Plan that prioritizes efficiency and renewable energy upgrades on properties in census tracts ranking in the top 25% of CalEnviroScreen scores in the County.

NEW Action and Target for Existing Nonresidential and Multifamily Buildings:

Target: Reduce energy consumption in nonresidential buildings by 50% by 2035

Action: Present to City Council for consideration a Nonresidential and Multifamily Energy Conservation and Disclosure Ordinance that requires:

- ✓ Annual benchmarking and disclosure of ratings (such as with EPA Portfolio Manager) for all nonresidential buildings and multifamily buildings (4+ units). Reports to building owners should include cost and benefit analysis of efficiency options and available incentives and financing options.
- ✓ Inefficient buildings implement efficiency improvements within a set period of time.
- ✓ Create a resident assistance program for low income residents, with the following goals:
 - Educate and support renters and homeowners to access available incentives.
 - Ensure that assistance is provided to 5,000 low income families annually.
 - Ensure that 6,300 low income residences are retrofitted by 2020.

Comment Letter AD

NEW Action and Target for New Buildings (Residential and Nonresidential): Present to City Council for consideration an ordinance to require achievement of net zero energy consumption in new residential and non-residential construction, via efficiency and installation of onsite renewable energy.

STRATEGY 2: CLEAN AND RENEWABLE ENERGY

Action 2.1 (Renewable Energy Citywide): Present to City Council for consideration a Community Choice Aggregation (CCA) that increases renewable energy supply on the electrical grid to achieve the 100% renewable energy target and prioritizes efficiency and local, distributed generation resources in disadvantaged communities and good-paying jobs for local residents.

STRATEGY 3: BICYCLING, WALKING, TRANSIT, AND LAND USE:

Transit Priority Areas Rankings, Supporting Measure (p39): Develop new priority ranking for planning and funding infrastructure improvements and maintenance that support achieving CAP transit, pedestrian, and bicycling goals in Transit Priority Areas, using the following prioritization order:

1. Areas that meet both of the city's criteria for a transit priority area (Meets the Public Resources Code § 21099 (a)(7) definition AND is in a census tract in the City that ranks in the top 25% of CalEPA's CalEnviroScreen scores within the County.
 - a. Areas identified as high risk for pedestrian and bicycling collisions should be the highest priority within these communities.
2. Census tracts in the City that rank in the top 25% of CalEPA's CalEnviroScreen scores within the County.
3. Meets the Public Resources Code § 21099(a)(7) definition of a transit priority area.

This priority ranking system shall be integrated into the Capital Improvement Priority Matrix (Policy 800-14), for mobility assets and shall apply to all eligible sources of capital improvements funds, including but not limited to, revenue generated by TransNet, Community Development Block Grant opportunities and Public Facilities Financing Plans, as well as any General Fund revenue allocated to the capital improvement program budget.

This priority ranking system shall also commit City funds for biking, walking, and transit supporting infrastructure in an amount sufficient to ensure the CAP's mode-share goals are met or exceeded. The share of funds should at a minimum match CAP's mode-share goals and be adjusted upward periodically to ensure achievement of the goals.

Action 3.1 (Transit): Implement the General Plan's Mobility Element and the City of Villages Strategy in Transit Priority Areas to increase the use of transit, prioritizing implementation in census tracts in the City ranking in the top 25% of CalEPA's CalEnviroScreen scores within the County.

Action 3.2 (Walking): Implement pedestrian improvements in Transit Priority Areas to increase commuter walking opportunities, prioritizing implementation in census tracts ranking in the top 25% of CalEPA's CalEnviroScreen scores within the County and are at high risk for collisions between pedestrians and motor vehicles.

Comment Letter AD

Action 3.3 (Bicycling): Implement the City of San Diego's Bicycle Master Plan to increase commuter bicycling opportunities, prioritizing implementation in census tracts ranking in the top 25% of CalEPA's CalEnviroScreen scores within the County and are at high risk for collisions between bicycles and motor vehicles.

Action 3.4 and 3.5 (Traffic Efficiency): Implement a Traffic Signal Master Plan (Action 3.4) and a Roundabouts Master Plan (Action 3.5) to reduce vehicle fuel consumption and improve safety and mobility, prioritizing corridors that have the highest pedestrian collision rates and are in census tracts ranking in the top 25% of CalEPA's CalEnviroScreen scores within the City.

New Supporting Measure: The City of San Diego's two voting representatives on the SANDAG Board shall vote and take other decision-making actions at SANDAG that are consistent with the CAP goals, the SANDAG Urban Area Transit Strategy (UATS) goals for regional and city transit connectivity, and City Resolution R-2011-966 goals, which direct:

1. That the RTP prioritize public transportation and mass transit projects and minimize the expansion of single-vehicle general purpose highway lanes.
2. That the RTP advance the timeline of funding for key commute routes, improving transit frequency, and active transportation projects.
3. That the RTP provide greater clarity about how greenhouse gas emissions Development reduction targets are being met in the long term, specifically how the aims of SB375 will be met through the life of the Plan out to 2050.
4. That the Sustainable Communities Strategy consider implementing concepts such as "Safe Routes to Transit" programs, prioritizing a "Transit First" system of projects, and ensuring that a Transit-Oriented strategy is developed to link mass transit with affordable housing development.

Action 3.6 (Transit-Oriented Development): Implement equitable transit-oriented development within Transit Priority Areas, including significant development of affordable residential housing with appropriate safety precautions. Commit to meeting the following TOD principles and goals:

- ✓ **INCLUSIONARY HOUSING/ZONING:** Significantly increase affordable housing units near transit stops and jobs. At least 50% of all housing developed or redeveloped as a consequence of any transit-oriented development should be protected to ensure that it remains permanently affordable. Furthermore, structure regulations so transit-oriented development enables anyone who wants to remain in the community to do so. New housing should be sited with appropriate buffers (300-500 feet) from freeways or high-traffic roads (roads with more than 100,000 vehicles per day) and including health design features such as air filters and sound walls.
- ✓ **NO NET LOSS:** Commit to "no net loss" of residents and local businesses with a multifaceted strategy that could include efforts to preserve existing affordable housing, help renters become owners before prices rise, and efforts to support local businesses.
- ✓ **PROVIDE OPPORTUNITY TRANSIT PASSES:** Provide opportunity transit passes for residents in the new housing development so they are able to access transit services.
- ✓ **LIVING WAGE JOBS:** Develop a strategy to create and promote living wage jobs near TOD locations.

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- ✓ **CULTURAL AND SOCIAL SERVICES ACCESS:** Prioritize affordable commercial space in TOD and surrounding areas for community centers, cultural centers, service providers and culturally relevant businesses.
- ✓ **REDUCE PARKING REQUIREMENTS:** Explore reducing parking requirements in TOD areas and accompany with transportation demand management strategies such as the development of a fund that supports free transit passes.
- ✓ **AUTHENTIC PUBLIC PARTICIPATION:** Include communities of color who are stakeholders in TOD planning and policy to be part of decision-making. Participation should go beyond legal mandates and provide appropriate languages to meaningfully engage.
- ✓ **ENSURE COMMUNITY BENEFIT:** Ensure TOD provides measurable community benefit, including connections to productive employment opportunities, access to public amenities, and an increase in local affordable housing. Support and promote the use of stakeholder-led agreements with developers, such as Community Benefits Agreements and Community Workforce Agreements.

STRATEGY 5: CLIMATE RESILIENCY

Action 5.1 Present to City Council for consideration a city-wide Urban Tree Planting and Urban Parks Program that prioritize implementation in census tracts ranking in the top 25% of CalEPA's CalEnviroScreen scores within the County and are underserved.

New Action Commit to completing a full climate adaptation plan by 2017 to identify and address the greatest risks to our infrastructure, environment, and public health, especially in the City's most vulnerable communities.

Comment Letter AD

EHC Comments on July 2015 Draft Environmental Impact Report, Climate Action Plan

SUMMARY: Analysis and Mitigation of Air Quality and Equity Impacts on Sensitive Receptors and Environmental Justice Communities—CAP Fails to Consider All Feasible Mitigations

The CAP DEIR notes that Air Quality impacts of the CAP would be “Significant and Unavoidable,” even after the proposed mitigations, because there could be “air emissions that would substantially deteriorate ambient air quality, including the exposure of sensitive receptors to substantial pollutant concentrations” (DEIR, ES-7). The DEIR fails to consider all feasible mitigations to address this impact and it further fails to acknowledge that such unmitigated impacts would also mean that the CAP would conflict with General Plan policy LU-I.3 to “protect public health, safety and welfare equitably...and address the needs of the disenfranchised.” Currently the DEIR claims the CAP would not conflict with the General Plan (DEIR 3A-21).

The DEIR additionally notes there could be significant impacts from the construction of large scale energy facilities, but fails to consider all available mitigation options in coming to its conclusion these impacts are “unavoidable.”

As noted above, we agree certain CAP actions have the *potential* to expose sensitive receptors to substantial pollutant concentrations as well as impose other impacts to neighborhood character; however we disagree these are “unavoidable” impacts. As we noted in our Scoping Comments and as we note throughout our comments now on the CAP DEIR, there are many things the City can and should do as a part of the CAP to avoid and mitigate harmful impacts to sensitive receptors, including people living in environmental justice communities identified as Census tracts ranking in the top 25% of CalEPA’s CalEnviroScreen scores within the County, while maximizing benefits to these communities.

We support the goal in CAP Chapter 4, Social Equity and Job Creation, to “Prioritize programs and actions to reduce emissions in disadvantaged communities that rank in the top 25 percent of CalEnviroScreen’s ranking for San Diego region communities” (CAP, Chapter 4, Social Equity and Job Creation, p51). However, this goal should not be isolated to only Chapter 4; it should be fully integrated throughout the programs and actions described in Chapter 3, to improve transparency and clarity.

We also support the CAP’s comment in Action 2.1, related to the implementation of 100% renewable energy, that “Efforts should be local in nature to benefit local renewable energy business, create jobs, and increase resiliency for the City” (CAP Chapter 3, p.35). However, this side comment should be embraced with more weight and enforceability, and include mandatory energy efficiency and conservation among the local energy strategies.

EHC and dozens of others recommended these concepts as an “Environmental Justice Alternative” in Scoping Comments, which the DEIR briefly acknowledges but then quickly and inappropriately dismisses (DEIR 8-3). We dispute the DEIR’s rebuttal that, because some actions are citywide or in the General Plan, an Environmental Justice Alternative is unnecessary. To the contrary, actions that are citywide necessitate a system for prioritizing implementation in order to create an orderly, transparent, and effective process for utilizing limited resources; we presume the City does not have the resources to immediately implement and achieve the entirety of citywide measures such as investment in pedestrian and bicycling facilities to achieve 7% walking commutes and 18% biking commutes. The City must find

Response to Comment AD-5

The Draft EIR concluded that air quality impacts would be significant and unavoidable at the program level due to the uncertainty air quality impacts that would occur with implementation of CAP Action 2.1. Nevertheless, Mitigation Measure AIR-1 is provided to mitigate potential air quality impacts to the extent feasible. Regarding consistency with the General Plan, a project “need not be in perfect conformity with each and every [general plan] policy” since “no project [can] completely satisfy every policy stated in [a general plan].” *Sequoyah Hills Homeowners Ass’n v. City of Oakland*, 23 Cal. App. 4th 704, 719 (1993). Moreover, while implementation of certain projects under the CAP may result in adverse air quality impacts, implementation of the CAP as a whole would result in overall increased air quality as a result of reduced greenhouse gas emissions, which would be consistent with General Plan Policy LU-I.3 providing for the “protect[ion] [of] public health, safety and welfare equitably . . .” and to “address the needs of the disenfranchised.”

Response to Comment AD-6

Please see Response to Comment AD-4. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

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somewhere to start in that process. We suggest the starting place be environmental justice communities who rank in the top 25% of regional CalEnviroScreen scores and are also within the transit priority areas.

Therefore, we urge the City to revisit and approve the Environmental Justice alternative to avoid many of the impacts the DEIR claims are "unavoidable." This concept and other mitigations are included throughout our comments on the DEIR and in our updated alternative at the end of these comments.

AD-6

STRATEGY 3, BICYCLING, WALKING, TRANSIT, & LAND USE

We agree with the conclusion in the DEIR's Transportation and Circulation Section F that the CAP would be consistent with the intent of City and regional plans that seek to improve local and regional transportation and we strongly support the targets to achieve 50% of commuter mode share via bicycling, walking, and transit by 2035 (Targets 3.1-3.3).

However, we also agree with other conclusions in the DEIR's Air Quality Section C and Transportation and Circulation Section F there are some inherent air quality and safety risks -- which are mitigable -- associated with transit-oriented development and active transportation, particularly for sensitive receptors and disadvantaged populations. There are additional potential impacts to Neighborhood Character, which could occur as a result of certain land use and transportation actions, which are not adequately analyzed or mitigated. Certain measures can and should be taken to avoid and mitigate such impacts, which we further describe below.

A. Safety Impacts and Mitigations for Sensitive Receptors and Disadvantaged Populations (STRATEGY 3, ALL ACTIONS)**RECOMMENDATIONS:**

- ✓ Include in Actions 3.2 and 3.3, related to funding and permitting projects that improve bicycling and pedestrian infrastructure and transit access, prioritize neighborhoods that rank in the top 25% of CalEnviroScreen scores in the County and are within the CAP's Transit Priority Areas. Further prioritize corridors identified as high risk for pedestrian and bicycling collisions.
- ✓ Include a supporting measure for Actions 3.1, 3.2, 3.3, and 3.5 to commit City funds to improve bicycling and pedestrian infrastructure citywide and access to transit, prioritizing top ranking CalEnviroScreen communities. The amount of funds should be sufficient to ensure the CAP's mode-share goals are met or exceeded and the share of funds should at a minimum match CAP's mode-share goals and be adjusted upward periodically to ensure achievement of the goals.
- ✓ Commit City support for a Regional Transportation Plan that funds transit and active transportation projects *before* freeways.

REASONS:

The DEIR's Transportation and Circulation Section notes that Actions 3.1 through 3.6 may result in "increased conflict between transportation modes, such as bicycle vs motor vehicle and mass transit vs pedestrian, potentially resulting in adverse impacts to traffic flow and increased safety issues" (DEIR 3.F-

AD-7

AD-8

AD-9

AD-10

Response to Comment AD-7

Impacts to neighborhood character are addressed in Section 3.B of the Draft EIR. As stated in the EIR, most of the proposed CAP actions do not have the potential to result in substantial visual incompatibilities with existing landscapes. Impacts from implementation of the City of Villages strategy have already been analyzed in the General Plan EIR. However, the development of large-scale renewable energy facilities within the City limits, which may result from implementation of CAP Action 2.1, could result in such incompatibilities. This could result in a significant impact to visual quality and neighborhood character, which is discussed in the Draft EIR.

Response to Comment AD-8

This comment does not address the adequacy of the Draft EIR. Comment noted. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

Response to Comment AD-9

This comment does not address the adequacy of the Draft EIR. Comment noted. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

Response to Comment AD-10

Please see Response to Comment AD-11.

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15). We concur with this assessment but we also conclude such impacts are mitigable with our recommendations below.

Residents of low-income neighborhoods— which make up about around 1/3 of the Transit-Priority Area acreage— face significantly higher collision rates between vehicles and pedestrians or bicyclists than does the average San Diegan. In fact, the City's 2014 Comprehensive Pedestrian Safety Study finds that residents in low-income neighborhoods are ten times more likely to be hit by a car as pedestrian residents living in more affluent neighborhoods.¹ This disparity must be addressed.

We support CAP Action 3.2 "Implement pedestrian improvements in Transit Priority Areas to increase commuter walking opportunities" and Action 3.3 "Implement the City of San Diego's Bicycle Master plan to increase commuter bicycling opportunities", as well as Supporting Measures to "Identify and address gaps in City's pedestrian network and opportunities for improved pedestrian crossings, using the City's Pedestrian Master Plan and the City's sidewalk assessment" (CAP p.39) and implement infrastructure improvements including "complete streets" to facilitate alternative transportation modes for all travel trips" (CAP p.39). However, the CAP should go further to prioritize active transportation infrastructure in areas that are high-risk for collisions and also face high rates of pollution, low-income, and other social factors identified by CalEnviroScreen.

Additionally, the measures above are moot if the City does not commit significant monetary investment in safe and robust bicycling, walking, and complete streets infrastructure where it is needed the most (CAP Actions 3.2, 3.3, and supporting measures). We support Strategy 3's Supporting Measure to "Develop a new priority ranking for infrastructure improvements in Transit Priority Areas that will be integrated into Capital Improvement Priority Matrix, Community Development Block Grant opportunities and Public Facilities Financing Plans" but we also recommend that this new ranking system additionally include CalEnviroScreen as an additional screening layer, in order to improve equity and mitigate potential conflict between transportation modes. The City should additionally revisit Policy 800-14 to improve transparency of the CIP process, how projects get on the list, how they are scored, and how they are ultimately selected. Improved transparency will allow the City and public to assess what additional changes, if any, are necessary to ensure equity and environmental justice.

Finally, if SANDAG does not also implement a transit-first regional transportation strategy that prioritizes significant and immediate funding for alternative transportation, there could still be safety and collision risks for sensitive receptors, as well as air quality impacts from additional roadway and highway construction and operations. Additional mitigations are needed in the CAP to ensure the City's commitment to facilitating a transit-first regional plan.

Additional mitigation is also needed to ensure the CAP's consistency with the General Plan, which requires the City to "make transit planning an integral component of long range planning documents and the development review process" (ME-B.9) and "Provide adequate capacity and reduce congestion for all modes of transportation on the street and freeway system. (f) Evaluate RTP proposals for new or redesigned streets and freeways on the basis of demonstrated need and consistency with General Plan policies and community plan facility recommendations." (ME-C-2) Again, the CAP should ensure the City's commitment to facilitating the implementation and resources needed for a regional transportation plan that puts transit first.

¹ Citywide Pedestrian Collision Analysis: City of San Diego Comprehensive Pedestrian Safety Study. Revised 4/28/2014. <http://www.sandiego.gov/tsw/pdf/pedestriansafetystudy/pedcollisionanalysis.pdf>

Response to Comment AD-11

This comment does not address the adequacy of the Draft EIR. Comment noted. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

Response to Comment AD-12

This comment does not address the adequacy of the Draft EIR. Comment noted. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

Response to Comment AD-13

This comment does not address the adequacy of the Draft EIR. Comment noted. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

Response to Comment AD-14

Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

Response to Comment AD-15

Regarding General Plan consistency, please see Response to Comment AD-5.

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B. Toxic Air Emissions Risk Mitigations for Sensitive Receptors and Disadvantaged Populations related to Transit-Oriented Development (ACTIONS 3.1 & 3.6)

RECOMMENDATIONS:

- ✓ Establish an exclusion zone a minimum of 300-500 feet from a freeway or high-traffic road (roads with more than 100,000 vehicles per day) so that residential density would not be allowed to be increased in this zone for any reason.
- ✓ Require High Efficiency Particle Filters on all new residential buildings;
- ✓ Place sound walls and vegetation between the roadway and the sensitive receptors;
- ✓ Locate building air intakes on the side of the building away from the freeway or roadway;
- ✓ Design buildings to minimize generation of indoor air pollutants (no wood burning fireplaces, no gas appliances, vented stoves, building materials and furnishings with minimum potential to offgas).
- ✓ Commit City support for a Regional Transportation Plan that funds transit and active transportation projects *before* freeways.
- ✓ Include a supporting measure for Actions 3.1, 3.2, 3.3, and 3.5 to commit City funds to improve bicycling and pedestrian infrastructure citywide and access to transit, prioritizing top 25% ranking CalEnviroScreen communities. The amount of funds should be sufficient to ensure the CAP's mode-share goals are met or exceeded and the share of funds should at a minimum match CAP's mode-share goals and be adjusted upward periodically to ensure achievement of the goals.

REASONS:

We support the encouragement of transit-oriented development in order to facilitate increased use of transit, walking, and biking, so long as certain measures are taken to avoid unintended health risks and displacement of low-income residents (see next section for discussion of displacement). We recognize that, if implemented without precautionary measures, Action 3.1 "Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas" and Action 3.6 "Implement Transit-Oriented Development within Transit Priority Areas" have the potential of creating localized pollution hot spots and exposure of sensitive receptors to nearby pollution sources, as stated in the PEIR (3.C-19).

The PEIR does not include any mitigations for this impact because, as stated, "...the City of Villages strategy is already City policy, and because it was already the subject of environmental review (the General Plan PEIR), potential impacts associated with implementation of the City of Villages have already been addressed in the General Plan PEIR." (3.C-23) However, the General Plan PEIR does not address the hazards of exposure of sensitive receptors to nearby freeways, major roads, or other sources of toxic air emissions or traffic related pollutants. Whereas the Health and Safety section of the General Plan PEIR does reference the City's collocation policy as a source of mitigations for exposure of sensitive receptors to industrial hazardous materials, the potential for exposure to toxic air emissions, including traffic pollutants such as diesel exhaust and benzene, is not analyzed or mitigated in that document or in the present EIR. Extensive new evidence has been published on the health hazards of near-roadway pollution exposure since the General Plan PEIR was completed in 2002. Much of this research has been done in southern California and is thus highly relevant to understanding potential health hazards of in-fill development near freeways in San Diego. As an example, a 2012 study concluded that a full 8% of childhood asthma cases in Los Angeles are attributable, at least in part, to residence within 75 meters (about 250 feet) from a major road. Contrary to previously held assumptions about respiratory disease and

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Response to Comment AD-16

Please see CAP Chapter 4. Also, the City's General Plan recognizes the importance of addressing environmental justice through equal access to and meaningful participation in the decision-making process and the need to ensure the equitable distribution of public facilities and services. The General Plan includes policies to pursue environmental justice in the planning process through greater community participation, to prioritize and allocate citywide resources to provide public facilities and services to communities in need, and to improve mobility options and accessibility for the non-driving elderly, disabled, low-income, and other members of the population.

To implement the General Plan and provide an equitable distribution of public facilities, infrastructure, and services, the City developed Council Policy 800-14 which sets the City's priorities for the City's Capital Improvements Program (CIP). The policy prioritizes projects in under-served communities including those with low income households, low community engagement and low mobility or access to transportation systems based on SANDAG census tract. The policy also prioritizes projects located in areas eligible for the Community Development Block Grant funds, and projects located within a half-mile of affordable housing.

Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting. Regarding General Plan consistency, please see Response to Comment AD-5.

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air pollution, these researchers find that roadway pollution causes some new cases of asthma, in addition to triggering existing asthma.²

Further, while the CAP (3.A-19) and General Plan LU-A.5 note that further environmental review and focused study will be conducted during community plan update processes to determine if locations are appropriate for mixed-use development and village design, we suggest that the CAP should be clearer and offer additional mitigations to minimize potential health, air quality, and displacement impacts while still facilitating transit-oriented development to achieve CAP Strategy 3. EIRs "must be written early enough so that whatever information is contained can practically serve as an input into the decision making process." (*RiverWatch v. Olivenhain Municipal Water Dist.* (2009) 170 Cal.App.4th 1186, 1207 quoting *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 77, fn. 5).

Finally, even if the City adopts our recommendations for mitigations with respect to building and siting transit-oriented and affordable development, if the City does not also implement significant investment in safe and robust bicycling, walking, and complete streets infrastructure where it is needed the most (CAP Actions 3.2, 3.3, and supporting measure) and—as noted in the prior section—if SANDAG does not implement a transit-first regional transportation strategy that prioritizes significant and immediate funding for alternative transportation, then there could still be air quality impacts for sensitive receptors from additional roadway and highway construction and operation.

C. Neighborhood Character: Displacement Risks and Mitigations for Disadvantaged Populations related to Transit-Oriented Development (ACTIONS 3.1 & 3.6)

RECOMMENDATIONS:

- ✓ **INCLUSIONARY HOUSING/ZONING:** Commit to significantly increase affordable housing units near transit stops and jobs to reduce vehicle miles travelled and increase equity, while using an appropriate buffer and siting to avoid exposing affordable housing residents to excess air pollution levels and other hazardous material. At least fifty percent of all housing developed or redeveloped as a consequence of any transit oriented development should be protected to ensure that it remains permanently affordable. Furthermore, local regulation should be structured so transit oriented development enables anyone who wants to remain in the community to do so.³
- ✓ **INCENTIVE-BASED ZONING:** Incentive-based zoning can reward developers with density bonuses or floor-area bonuses if they meet affordable housing counts.⁴
- ✓ **NO NET LOSS:** The strategies to accomplish the goal of "no net loss" of residents and local businesses should be pursued. A multifaceted strategy could include efforts to preserve existing

² Perez L, Lurmann F, Wilson J et al., 2012. Near Roadway Pollution and Childhood Asthma: Implications for Developing "Win-Win" Compact Urban Development and Clean Vehicle Strategies. *Environmental Health Perspectives*, Vol 120, Issue 11, November 2012. *Environ Health Perspect*; DOI:10.1289/ehp.1104785.

³ Building the Line to Equity: Six Steps for Achieving Equitable Transit Oriented Development in Massachusetts <http://www.reconnectingamerica.org/assets/Uploads/2006BuildingTheLineToEquity.pdf>

⁴ *Mixed-Income Housing Near Transit* One in a series of best practices guidebooks from The Center for Transit-Oriented Development Increasing Affordability With Location Efficiency <http://www.reconnectingamerica.org/assets/Uploads/091030ra201mixedhousefinal.pdf>

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Response to Comment AD-17

Proposed CAP Action 3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas, and Action 3.6 Implement Transit-Oriented Development within Transit Priority Areas would result in the development of more dense, built-up, and transit and alternative transportation-oriented development, particularly within the TPAs. Since there is little remaining vacant land in the City available for development, implementation of the City of Villages strategy would largely occur through infill and redevelopment occurring in selected built areas. Impacts to Visual Effects and Neighborhood Character are analyzed in Draft EIR Section 3.b. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

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affordable housing, help renters become owners before prices rise, and efforts to support local businesses.⁵

- ✓ **TRANSIT PASSES:** Often times, people who are in need of affordable housing are also in need of affordable transportation options. Provide opportunity transit passes for residents in the new housing development so that they are able to access transit services. This type of program is currently being done in Los Angeles. In MacArthur Park, residents of the new housing development are even given a monthly METRO pass (a subsidy that both the housing developers and METRO help allocate).⁶ Each household gets one monthly free pass on transit and residents pay \$20 (when the true market cost is \$70 for the pass). This public transportation pass voucher has been able to help housing developers receive state tax credits.
- ✓ **LIVING WAGE JOBS:** Traditional market-based and conventional TOD planning primarily focuses on housing and often ignores job quality. In TOD areas, low-wage service sector jobs are increasing more than living wage jobs. A strategy for living wage jobs near TOD locations needs to be included.
- ✓ **CULTURAL AND SOCIAL SERVICES ACCESS:** Community-serving institutions and businesses are needed to stabilize existing low-income communities of color as gentrification occurs.⁷ Therefore, affordable commercial space should be prioritized in TOD and surrounding areas for community centers, cultural centers, service providers and culturally relevant businesses. A good example of this, the Fruitvale Village in Oakland, has a health care facility, a childcare center, a public library, a senior center, and a charter high school. While the MacArthur Park TOD does not have any of these social services, they are located in the neighborhood within walking distance of the TOD.⁸
- ✓ **REDUCE PARKING REQUIREMENTS:** Reducing parking requirements can increase the feasibility of mixed-income and mixed-use TOD because parking is expensive. Parking influences the development budget and is a key factor in determining housing prices.⁹ Reducing parking requirements can be addressed with transportation demand management strategies such as, developing a Transit Pass Fund, which supports transit passes for residents living in Affordable Housing.
- ✓ **AUTHENTIC PUBLIC PARTICIPATION:** Include communities of color who are stakeholders in TOD planning and policy to be part of decision-making. Mechanisms for authentic public participation need to be incorporated into TOD projects, especially those where there are gentrification risks. This participation needs to go beyond what is legally mandated and also go

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⁵ Building the Line to Equity: Six Steps for Achieving Equitable Transit Oriented Development in Massachusetts <http://www.reconnectingamerica.org/assets/Uploads/2006BuildingTheLineToEquity.pdf>

⁶ Sandoval, Gerardo and Roanel Herrera. TRANSIT-ORIENTED DEVELOPMENT AND EQUITY IN LATINO NEIGHBORHOODS: A COMPARATIVE CASE STUDY OF MACARTHUR PARK (LOS ANGELES) AND FRUITVALE (OAKLAND). National Institute for Transportation and Communities (NITC). April 2015.

⁷ <http://blog.enterprisecommunity.com/2012/06/field-notes-equitable-transit-oriented-development>

⁸ Sandoval, Gerardo and Roanel Herrera, April 2015.

⁹ *Mixed-Income Housing Near Transit* One in a series of best practices guidebooks from The Center for Transit-Oriented Development Increasing Affordability With Location Efficiency

<http://www.reconnectingamerica.org/assets/Uploads/091030ra201mixedhousefinal.pdf>

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beyond inauthentic forms of public engagement so that decisions that have already been made by transportation planners are not the driving force behind large-scale transportation projects.¹⁰

- ✓ ENSURE COMMUNITY BENEFIT: Since TOD utilizes public investment or regulatory relief, it should provide measurable community benefit, including connections to productive employment opportunities, access to public amenities, and an increase in local affordable housing.¹¹ Local governments and elected officials should support and promote the use of stakeholder-led agreements with developers, such as Community Benefits Agreements and Community Workforce Agreements.

REASONS:

The DEIR's analysis and mitigation of the Neighborhood Character impacts of CAP Actions 3.1 and 3.6 is incomplete. Although the DEIR identifies that Actions 3.1 and 3.6 may result in impacts to Neighborhood Character that "could alter or block scenic views, create new sources of light or glare, or result in changes to or incompatibilities with existing neighborhood character" (DEIR 3.B-21), the DEIR fails to acknowledge that a major contributor to neighborhood character is the people who live in the neighborhood, and there may be potential displacement of current low-income and disadvantaged residents as a result of CAP Actions 3.1 and 3.6.

The addition of market-rate homes to create Transit-Oriented Development can drive up rents of surrounding homes and therefore may cause economic displacement of residents living in a low-income area. Further, lower-income residents are often not able to afford the transit and cultural or retail opportunities that accompany transit-oriented development, which can also lead to displacement and isolation. To avoid these neighborhood character and equity impacts, it is necessary commit to our above recommendations for affordable housing, transit access, and other community benefits.

We support the encouragement of transit-oriented development as long as the development is envisioned by the impacted residents, with goals to facilitate increased use of transit, walking, and biking, and as long as measures are taken in order to mitigate and avoid such displacement, which can impact the neighborhood character.

D. GHG Impacts of New and Significant Redevelopment: Transportation-Related Mitigations Needed in CEQA Checklist, Appendix A

RECOMMENDATIONS:

- ✓ The Checklist should require the mitigations we recommend in the prior two sections for appropriate buffers for residential projects, affordability of residential projects, air filters, sound walls, and maximized indoor air quality, as well as investment in active transportation infrastructure in the vicinity.

REASONS:

CAP Appendix A "Consistency Checklist" Part 1 for Land Use and Transportation measures for new, large developments does not sufficiently mitigate the potential air quality, safety, and equity impacts identified in the above two sections of our comments. Checklist Part 1 currently proposes that projects should be simply consistent with the existing land use designations in the General Plan, the applicable

¹⁰ Sandoval, Gerardo and Roanel Herrera, April 2015.

¹¹ Building the Line to Equity: Six Steps for Achieving Equitable Transit Oriented Development in Massachusetts <http://www.reconnectingamerica.org/assets/Uploads/2006BuildingTheLineToEquity.pdf>

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Response to Comment AD-18

Please see Response to Comment N-3.

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Community Plan, the Bicycle Master Plan, and the Municipal Code, and be located in a transit priority area, which is insufficient.

STRATEGY 2: CLEAN AND RENEWABLE ENERGY

A. Action 2.1 Renewable Energy: Impacts and Mitigations for Air Quality, Land Use and Visual and Neighborhood Resources

RECOMMENDATIONS:

- ✓ Establish a policies for the achievement of Action 2.1 and the 100% clean energy target to:
 - Facilitate solar installation in neighborhoods who are most impacted by climate change
 - Commit to the state's energy loading order of conservation, efficiency, and in-basin, rooftop distributed generation for renewable energy on rooftops, parking lots, and ground-mounted systems, before other energy procurement
 - Policies to divert biomass for green waste recycling and use for landscaping mulches to reduce evapotranspiration rates of landscaping plants, thereby saving water.
 - Facilitate the creation of good jobs for local residents

REASONS:

We strongly support target 2.1 to achieve 100% clean energy citywide by 2035 and believe this to be an achievable target if implemented properly, as demonstrated in other jurisdictions. However, we also acknowledge that if adequate mitigation measures are not implemented, CAP Action 2.1, Community Choice Aggregation Program may result in development of large-scale renewable energy facilities that could have multiple kinds of significant impacts. However, we disagree with the DEIR's conclusion that the potential impacts to Visual Effects and Neighborhood Character are unavoidable. To the contrary, there are additional mitigations available that were not considered by the DEIR, such as prioritizing local in-basin solar and energy efficiency before large scale energy facilities. This mitigation should be included in the CAP to avoid this impact.

One of the impacts identified by the DEIR stems from the potential construction of combustion (biomass, biogas) facilities that would be considered stationary sources, and which may therefore result in significant operational air emissions. Biomass burning is the least environmentally preferable of the renewable energy options, yet the DEIR provides no mitigations to address the potential air quality impact of development of biomass or other large scale energy facilities beyond whatever conditions are attached to air permits for stationary biomass or biogas facilities. To the contrary, additional Mitigation can and should be included in the CAP to avoid this impact.

Additionally, construction of other large-scale renewable facilities that may be located remotely or far away from San Diego could lead to emissions and other neighborhood and visual impacts during construction and operation of the facilities and associated transmission and distribution infrastructure. As noted in the DEIR, such facilities may also use large amounts of water—a resource that uses energy to transport and distribute and is becoming scarcer as climate change impacts become more pronounced. While the DEIR attempts to mitigate potential conflicts with Land Use and Visual and Neighborhood Resources by proposing Mitigation Measure LU-1 to develop appropriate siting guidelines and it attempts

↑ AD-18

AD-19

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Response to Comment AD-19

As addressed in Chapter 3.A, Land Use, of the Draft EIR, future land use changes and any large-scale renewable energy projects proposed to implement the CAP would undergo further CEQA analysis to identify project-specific impacts, to identify feasible mitigation measures, and to consider alternatives, and to provide for public review and comment, prior to approval of any plan or project. Through the CEQA process, the compatibility of surrounding land uses and applicability of all land use plans would be reviewed to determine land use impacts that would result from a particular project, once sufficient details are available to provide for meaningful environmental review.

Comment Letter AD

to avoid excessive water use with Mitigation Measure WS-1, more can and should be done to avoid these impacts.

We support the note in the July 2015 CAP regarding Action 2.1 that “Efforts should be local in nature to benefit local renewable energy business, create jobs, and increase resiliency for the City” (CAP Chapter 3, p.35). As the DEIR acknowledges, “Small-scale renewable energy systems, such as residential and small commercial roof-top solar photovoltaic (PV), generally result in minimal environmental impacts” (DEIR 3.A-18). EHC recommends further codifying this concept as a DEIR mitigation measure and in the CAP Actions, in order to add accountability to this mitigation of potential Air Quality, Land Use, and Visual and Neighborhood impacts of large-scale renewable energy--particularly biomass or biogas—as well as comply with General Plan Policy CE-I.12 to “Use small, decentralized, and appropriately sited energy efficient power.”

AD-19

B. Actions 2.2 and 2.3 Municipal Vehicles: Impacts and Mitigations AIR-1 and AIR-2

RECOMMENDATIONS:

- ✓ Action 2.3’s target should be: 100% conversion from diesel fuel used by municipal solid waste collection trucks-- including privately-owned trucks contracted or permitted by the City to zero emissions (electric) or near-zero emissions (hybrid electric) trucks by 2035.

REASONS:

We support CAP Action 2.2 (increase municipal zero emissions vehicles to 50% by 2020 and 90% by 2035) and the concept of 2.3 (municipal alternative fuel policy to convert 100% of municipal waste collection truck to low emissions fuels by 2035). However, we recommend Action 2.3 should commit to zero emissions (electric) or near-zero emissions trucks (electric hybrid), rather than natural gas, which still has tailpipe emissions in addition to larger lifecycle emissions with sourcing, distribution, and leakage of the gas. Medium size heavy-duty trucks are now a viable, commercially available option and Class 8 fully electric trucks are being piloted at the Ports of San Diego, L.A. and Long Beach and are near commercial availability, including from San Diego County-based company Transpower. Battery electric trucks are already commercially available for lighter classes of trucks, such as delivery trucks.

AD-20

RECOMMENDATIONS:

Mitigations AIR-1 and AIR-2 be amended to include the following

- ✓ The City shall seek funding for implementation of pilot scale electric or hybrid electric vehicles, if these are not yet commercially available.
- ✓ The City shall require an increasing percentage of construction and collection vehicle fleets to be electric or hybrid electric vehicles, as these become commercially available.

AD-21

REASONS:

The DEIR mitigations for construction equipment (AIR-1) and collection vehicles (AIR-2) assume that these will continue to be fossil-fueled vehicles—gasoline or natural gas—which is inconsistent with Action 2.2 and our above recommendations for Action 2.3.

Response to Comment AD-20

This comment does not address the adequacy of the Draft EIR. Comment noted.

Response to Comment AD-21

Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

Comment Letter AD

STRATEGY 1: ENERGY AND WATER EFFICIENT BUILDINGS

A. Overview of Impacts and Mitigations for Strategy 1

Energy efficiency is a cost-effective and plentiful energy resource that should be utilized as the first step in achieving the 100% renewable energy target of CAP Strategy 2. We support the CAP Strategy 1's inclusion of energy efficiency targets for residential (Target 1.1) and municipal (Target 1.2). However, the actions described in the CAP Appendix and DEIR are insufficient to actually meet those targets, and therefore additional mandatory action must be included, which we further describe below. In addition, we urge the City to adopt goals and actions in the CAP for nonresidential building energy consumption, which make up a significant portion of building energy demand in San Diego. We also urge the City to take a stronger "Lead By Example" approach to efficiency and solar with its own facilities (Action 1.2). Finally we recommend additional analysis, data correction, and mitigation for water conservation (Actions 1.3-1.5).

Maximizing efficiency in all sectors is necessary to help mitigate some of the potential air quality, land use, neighborhood, and water impacts the DEIR describes could result from large-scale renewable energy installations that may be built to meet the CAP's 100% renewable energy goal.

Maximizing efficiency is also necessary for the CAP to be consistent with General Plan policies to:

- "Coordinate City energy planning programs with federal, state, and regional agencies. *Maximize energy efficiency*, use of clean renewable resources, and demand response." (CE-I.2)
- "Pursue investments in energy efficiency and direct sustained efforts towards *eliminating inefficient energy use*." (CE-I.7)
- Implement development policies to protect public health, safety and welfare equitably among all segments of the population and address the needs of the disenfranchised" (LU-I.3).

Further, maximizing energy efficiency opportunities for low-income households— who are disproportionately vulnerable to a higher energy cost burden and to living in older, less efficient, homes with poor indoor air quality— is necessary for the City to meet the CAP's equity goals and comply with General Plan policy to "Implement development policies to protect public health, safety and welfare equitably among all segments of the population and address the needs of the disenfranchised" (LU-I.3).

B. Action and Target 1.1 (Residential Building Energy Use)

RECOMMENDATION:

EHC recommends the EIR include the following mitigations to be included in Strategy 1, which may be phased in over time:

- ✓ Apply Energy Conservation and Disclosure Ordinance (Action 1.1) to *all* residential units, whether they are owner-occupied or renter-occupied, single-family or multifamily, at whatever trigger point is ultimately chosen for the ordinance (Appendix B and the DEIR assume point of sale, though other options are available and worthy of examination).¹² Ordinance should include:

¹² Alternatively, multifamily buildings could be addressed in a separate Commercial and Multifamily Building Benchmarking, Disclosure, and Conservation Ordinance, as the tools to address benchmark and upgrade commercial and multifamily buildings are generally more similar than those used to address single-family homes.

Response to Comment AD-22

Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting. Regarding General Plan consistency, please see Response to Comment AD-5.

Response to Comment AD-23

This comment does not address the adequacy of the Draft EIR. Comment noted. Regarding commercial building benchmarking and disclosure, please see Response to Comment K-3. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

AD-22

AD-23

Comment Letter AD

- ✓ Mandatory energy assessments and disclosure of assessments.
- ✓ Mandatory efficiency improvements for inefficient/low-performing buildings, as identified by the energy benchmarking scores, including through participation in a federal, state, or utility funded energy efficiency program.
- ✓ Significantly increase the City's outreach and education for landlords and tenants about energy efficiency opportunities and funding opportunities, starting with the most inefficient buildings as identified by the energy benchmarking scores.
- ✓ Expand access to financing and funding, with a priority for facilitating improvements in low-moderate income properties (similar to an existing Supporting Measure for Strategy 1, but more focused)
- ✓ Create a resident assistance program for low income residents, with the following goals:
 - Educate and support renters and homeowners to access available incentives.
 - Ensure that assistance is provided to 5,000 low income families annually.
 - Ensure that 6,300 low income residences are retrofitted by 2020.

AD-23

REASON:

We support the inclusion of residential efficiency targets and a residential Energy Conservation and Disclosure Ordinance (Action 1.1) as the first step in a menu of options to reduce energy demand and achieve 100% renewable energy. However, the "Conservation" component of the "Energy Conservation and Disclosure Ordinance" is virtually nonexistent in the ordinance described in CAP Appendix B. In fact, the DEIR fails to analyze or mitigate the fact that Action 1.1 would completely fail to meet CAP Target 1.1. Whereas CAP Target 1.1 is to "Reduce Energy use by 15% per unit in 20% of residential housing units by 2020 in 50% of units by 2035," the *actual result* projected by CAP Appendix B is that energy will be reduced in only 1.1% of residential units by 2020 and in only 2.85% of units by 2035. Looked at another way, the CAP Appendix B projects the Ordinance for Action 1.1 will only achieve about 5% of what the CAP aims to achieve. This is especially concerning given that the targets are low to begin with—far lower than the state's target set in 2011 to reduce energy use in all existing homes by 40% by 2020.¹³

AD-24

This failure is due to the inappropriate assumptions made in Appendix B that the ordinance would:

- only apply to *owner-occupied* units at point-of-sale or remodel, prematurely eliminating about half of residential units from eligibility; and
- not require actual efficiency improvements, instead only requiring disclosure of energy use.¹⁴

¹³ California's Long-Term Energy Efficiency Strategic Plan, CPUC, Jan 2011

¹⁴ The inadequacy of the ordinance is due CAP Appendix B inappropriately assuming:

(a) The ordinance would apply only to owner-occupied units and would not apply to units occupied by renters (Appendix B-13), which prematurely eliminates about half of residential units from eligibility.

(b) Energy disclosure would be required at the Point of Sale or remodel, which, based on the annual number of sales and remodels, would reach 19% of *owner-occupied* units by 2020 and 48% of *owner-occupied* units by 2035—about half of the reach of Target 1.1 (which is for all residential units).

(c) No efficiency improvements would be required and, therefore, only an estimated 12% of the owner-occupied units who must disclose their energy use under the ordinance would actually reduce energy use (Appendix B-15, pdf p29).

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Response to Comment AD-24

The target for CAP Action 1.1 is to reduce energy use by 15% per unit in 20% of residential housing units by 2020 and 50% of units by 2035. The methodology outlined on pages A-14 through A-16 in CAP Appendix A provides for an estimate of the GHG reductions that Action 1.1 would be expected to achieve. Since the Energy Conservation, Benchmarking, and Disclosure Ordinance has not been prepared, the exact requirements for the ordinance are unknown. Therefore, the CAP assumes a basic amount of GHG reductions that could be attributable to the action. In CAP Appendix A, it is explained that rented units were not included in the calculations because it was assumed that landlords would be unlikely to improve efficiency for units where renters pay the energy costs.

The Energy Conservation, Benchmarking, and Disclosure Ordinance may include rental units, but the CAP Appendix A did not make this assumption to ensure that forecasted GHG reductions were not overstated. If the ordinance includes measures not assumed in the CAP, the City will amend the CAP accordingly. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting.

Comment Letter AD

The above descriptions of Action 1.1 ordinance would disproportionately leave out low-income households, who are far more likely than the average San Diegan to:

- Rent rather than own their home (69% renters versus 31% owners in SDG&E territory), which is problematic as many landlords are:
 - Unaware¹⁵ of the many funding programs providing free and subsidized upgrades¹⁶
 - Hesitant to permit renters to participate in free energy upgrade programs¹⁷
 - Unwilling to remedy health and safety risks that may surface during energy assessments.¹⁸
- Face a higher energy cost burden (very-low income Californians spend 29% of income on utilities versus the 5% spent by the average Californian¹⁹)
- Live in inefficient homes: low-income families pay 6.6 cents/sq. ft. for energy bills whereas adequate-income households 5.7 cents/sq. ft.²⁰
- Live in older, homes that often have with poor indoor air quality (58% of low-income multifamily buildings in SDG&E territory were built before 1980)

AD-24

No household, especially a vulnerable, low-income rental household, should be forced to forego the multiple benefits of energy efficiency due to a landlord's lack of awareness or owner non-cooperation. It is the City's obligation under the General Plan to maximize efficiency (CE-I.2 and CE-I.7) and to "Implement development policies to protect public health, safety and welfare equitably among all segments of the population and address the needs of the disenfranchised" (LU-I.3). And, it is the CAP's obligation under CEQA to be consistent with the General Plan and mitigate impacts of the plan such as those could arise from large-scale renewable energy installations. For these reasons, the CAP must include more robust education and outreach to landlords— particularly for buildings with low-income tenants— about financing opportunities and cost-saving benefits of efficiency, *alongside requiring underperforming buildings to be upgraded.*

C. Action 1.2: Municipal Energy Strategy

RECOMMENDATION:

- ✓ Municipal Energy Strategy should prioritize energy efficiency and renewable energy installations on municipal facilities located within disadvantaged communities identified by CalEnviroScreen.
- ✓ Target 1.2 should be to reduce energy consumption at municipal facilities by 50% by 2035.

AD-25

¹⁵ About 65% of multifamily building owners and managers are *not* aware of any financing options that may assist with the expenses to upgrade or replace equipment and 35% have not heard of utility programs that provide income-qualified households with free equipment and energy efficiency services. (*ESAP Program Multifamily Segment Study*, December 2013, p83)

¹⁶ [Energy Savings Assistance Program](#), [Energy Upgrade California](#), [Multifamily Energy Efficiency Rebates](#), [Single-Family Affordable Solar Program](#), [Multifamily Affordable Solar Program](#); Low-Income Weatherization Program, CSD <http://www.csd.ca.gov/Home/LowIncomeWeatherizationProgram.aspx>; Weatherization Assistance Program, <http://www.csd.ca.gov/services/residentialenergyefficiencyservices.aspx>

¹⁷ 33% of multifamily building owners admit to being unsupportive, or only supportive with conditions, of tenant participation in utility programs if it means filling out paperwork and allowing contractors to have access to the property (The Cadmus Group, *ESAP Program Multifamily Segment Study*, December 2013, p92)

¹⁸ HMG, *Lessons Learned through Piloting Energy Upgrade California Multifamily Programs*, July 2013, p 13

¹⁹ The Cadmus Group, *ESAP Program Multifamily Segment Study*, Prepared for PG&E, December 2013, p15

²⁰ The Cadmus Group, *ESAP Program Multifamily Segment Study*, Prepared for PG&E, December 2013, p57

¹⁸ Environmental Health Coalition comment letter on SD Climate Action Plan DEIR

Response to Comment AD-25

This comment does not address the adequacy of the Draft EIR. Comment noted. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

Comment Letter AD

REASON:

The state's Existing Buildings Action plan calls for local government leadership on energy efficiency²¹ and also the City's General Plan calls for coordination of City energy programs with state agencies (CE-I.2). EHC recommends the City to lead by example with a municipal energy efficiency target that is least as strong as, if not stronger than, the target for commercial facilities. As we recommend a nonresidential target of 50% reduction by 2035, we recommend the City also adopt that target for municipal facilities. The target currently in the draft CAP is 25% by 2035.

Additionally, the CAP and EIR should include measures to ensure compliance with the CAP's social equity goals and the General Plan's commitments to prioritize and allocate city resources to ensure disenfranchised communities with the greatest need have access to public facilities and services (LU-I.3).

D. *NEW* Commercial Energy Conservation and Disclosure Ordinance

RECOMMENDATION:

- ✓ Set a goal to reduce energy consumption in nonresidential buildings by 50% by 2035
- ✓ Adopt an ordinance that requires annual benchmarking and disclosure of nonresidential buildings and multifamily buildings and requires efficiency improvements for underperforming (inefficient) buildings.
- ✓ Significantly increase the City's outreach and education for landlords and tenants about energy efficiency opportunities and funding opportunities, starting with the most inefficient buildings as identified by the energy benchmarking scores.

REASON:

Commercial buildings represent a large portion of citywide energy demand and greenhouse gas emissions and are an opportunity for a cost-effective way to reduce greenhouse gas emissions and limit the need to construct new energy generation facilities. Many cities around the county have recognized this and have adopted commercial and residential conservation and disclosure ordinances. Unfortunately, the draft CAP does not identify a commercial building energy efficiency goal, action, or target and the DEIR fails to analyze the impacts of this missed opportunity. Maximizing efficiency in nonresidential buildings, in addition to residential buildings, should be used as mitigation for the potential need to construct new large energy generation facilities resulting from Action 2.1.

As there is significant overlap in commercial buildings and as multifamily buildings (4+ units) in terms of the tools to benchmark (EPA Portfolio Manager and Energy Star scores) and make efficiency improvements, the City could consider addressing commercial and multifamily buildings together in one ordinance, using the recommendations below. We suggest examining the ordinances from the City of Austin, Berkeley, and San Francisco and base models.²²

E. New Buildings Energy Use (CAP Strategy 1 and Appendix A, Consistency Checklist)

²¹ California's Existing Buildings Energy Efficiency Action Plan, CEC, March 2015

²² Summarized by IMT in "Guide to State & Local Energy Performance Regulations, Version 3.0"
<http://www.imt.org/uploads/resources/files/GuideToStateandLocalEnergyPerformanceRegulations2015.pdf>

Response to Comment AD-26

This comment does not address the adequacy of the Draft EIR. Comment noted. Regarding commercial building benchmarking and disclosure, please see Response to Comment K-3. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

Comment Letter AD

RECOMMENDATION:

The EIR should include mitigation to rectify noncompliance with the General Plan and help minimize the potential need for new energy generation facilities, by including the following into the CAP and Appendix A Consistency Checklist Parts 2:

- ✓ Require all new buildings to be Net Zero Energy, including with on-site clean energy to meet their electricity needs.
- ✓ Require new buildings that are not within Transit Priority areas to produce more clean energy on site than they consume.

AD-27

REASONS:

CAP Strategy 1- General Plan Inconsistency

The DEIR fails to recognize the CAP's omission of energy efficiency requirements for all new buildings and significant remodels. As required in the City's General Plan policies CE-A.5 and HE-J.8, the CAP should include standards to require net zero energy consumption in new buildings.²³ The supporting measure in Strategy 2 "to achieve net zero energy consumption by employing sustainable or "green" building techniques for the construction and operation of buildings" is different and lesser than adopting new standards and requirements, as the General Plan calls for.

AD-28

Appendix A, Consistency Checklist- General Plan Inconsistency

CAP Appendix A "Consistency Checklist" for new, large developments is also grossly insufficient for the energy measures in Checklist Parts 2 and 3, is noncompliant with General Plan policies, and misses the opportunity to maximize efficiency and local solar to mitigate and minimize the need to construct large energy generation facilities, a potential impact identified by the DEIR for Action 2.1.

AD-29

First, the energy measures in the checklist apply only to *residential* developments over the screening threshold— only developments of an extremely large number of units—and not to commercial developments and individual residential construction (Consistency Checklist, pp. 6 and 9). This threshold misses the opportunity to maximize efficiency in a large portion of new residential development and all commercial development under the threshold, and would be inconsistent with the General Plan.

Second, the initial Checklist Part 2 requirement is to reduce energy use only by 15% below *average* residential energy consumption and reduce water use by only 5% below average (Consistency Checklist, pp. 6-7). Just slightly better than *average* is not a standard for which San Diego should strive, is not even consistent with state Title 24 standards for new construction, and is not consistent with the General Plan policies CE-A.5 and HE-J.8 to require net zero energy for new buildings. It is also a missed opportunity to minimize the need to construct new large energy generation. All new construction—residential and commercial of all sizes— should be required to be net zero energy by 2020.

AD-30

Third, Checklist Part 3 requires residential developments that are *not within Transit Priority Areas* only to use 25% less energy and only 8% less water than *average*. (Consistency Checklist, pp.9-10). As projects

AD-31

²³ General Plan Conservation Element CE-A.5: "Develop and *implement sustainable building standards for new and significant remodels of residential and commercial buildings to maximize energy efficiency*, and to *achieve overall net zero* energy consumption by 2020 for new residential buildings and 2030 for new commercial buildings." General Plan Housing Element: "HE-J.8 **Require net-zero energy for new residential buildings** by the year 2020 to meet the State's goal outlined in the Long-Term Energy Efficiency Strategic Plan."

²⁰ Environmental Health Coalition comment letter on SD Climate Action Plan DEIR

Response to Comment AD-27

Please see Response to Comment N-3.

Response to Comment AD-28

Page 34 of the CAP specifies that the City develop a Zero Net Energy Policy for new municipal-owned buildings. The CPUC Strategic Plan and 2007 Integrated Energy Policy Report adopted zero net energy goals for new construction in California that will be enforced through future iterations of the CalGreen Building Code. Therefore, the City can rely on state legislation to implement this General Plan goal, and therefore, a City specific requirement is not specifically included within the CAP.

The supporting measures for Strategy 2: Clean & Renewable Energy call for the implementation of the General Plan Policy CE-A.5. Policy HE-J.8 includes a similar action, and the CAP implements both policies under this supporting measure.

Response to Comment AD-29

Please see Response to Comment N-3.

Response to Comment AD-30

Please see Response to Comment N-3.

Response to Comment AD-31

Please see Response to Comment N-3.

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not within Transit Priority Areas are likely to cause an increase in transportation-related emissions, these projects should be doing far more to reduce more greenhouse gas emissions from energy and water use. Such projects—both residential and commercial—should produce *more* clean energy than they consume and reduce water use by far more than 8%.

F. Water Analysis, Actions 1.3, 1.4, and 1.5

RECOMMENDATION:

Given the strong correlation between energy, emissions, and water usage, we recommend lowering the target water usage number, using Sydney, Australia—a similar climate to San Diego—as a model for water conservation targets and strategies. We also recommend increasing the annual *share* of recycled water/potable use, as opposed to the annual *volume* (1.5.2), given that water conservation and usage reduction is the goal.

REASON:

The DEIR's analysis of impacts on water resources fails to use accurate data. First, Appendix B overestimates the 2010 baseline per capita daily water use, which Appendix B-17 estimates to be 151 gallons/capita/day. However, 2010 city-wide daily per capita water use was approximately 127 gallons per capita per day, and is therefore already under the 2020 target of 140 gal/capita/day (in CAP Appendix B). This means that the draft's 2020 target would be an *increase* from today's water usage and consequently an increase in energy consumption and GHG emissions.

As Coastal Environmental Rights Foundation (CERF) pointed out in their October 2012 comments on the 2012 draft climate plan, which used the similar water data as used in the July 2015 plan—

According to the City's 2010 Urban Water Management Plan (UWMP), the City has already achieved this target—so no additional energy savings will result from baseline conditions. (2010 UWMP, pp. 3-6 to 3-10 [reflecting 2010 annual daily per capita water use was 127 gallons per capita per day]).... Before the City claims conservation as an energy reduction measure, it must accurately and transparently quantify its current and future anticipated water supply. Until this is done, the City must assume its water efficiency measures will not only fail to result in energy reduction, but will likely incentivize water waste because of the embarrassingly low UWMP and SBX7 targets set by the City.

Additionally, the proposed targets are to reduce water from the BAU level, not the 2010 baseline. ("The CAP includes three actions that result in per capita water consumption reduction from its *projected* per capita use in 2020 and 2035", Appendix B-17).

Finally, Appendix B likely overestimate how much water will be reduced by the CAP's Water Conservation Ordinance, since the Appendix B bases its analysis on the City of Berkeley's ordinance (Appendix B-20), which includes requirements for actual upgrades, whereas it's not clear that San Diego's would require actual upgrades.

GENERAL PLAN CONSISTENCY

We disagree with the DEIR's conclusion that the CAP is fully consistent with the General Plan (DEIR Section 3.A). To the contrary, without the mitigations we recommend in the prior sections of our comments, CAP Chapter 3 "Implementation and Monitoring" does not explicitly prioritize low-income,

AD-31

AD-32

AD-33

Response to Comment AD-32

The commenter states that the use of 151 gallons per capita per day (gpcd) is incorrect and that the correct number for 2010 is 127 gpcd. CAP Appendix A has been updated to reflect the correct reference for 2010 gpcd usage of 151 gpcd. However, regardless of baseline water usage, the CAP only accounts for gpcd reductions that can be achieved from the relevant CAP actions (Actions 1.3, 1.4, and 1.5). Therefore, the GHG reductions accurately reflect the gpcd reductions attributable to implementation of the CAP.

Regarding the reductions estimated from implementation of Action 1.4, the commenter is correct that the reductions were estimated using the City of Berkeley's Commercial and Residential Conservation Ordinances. The commenter asserts that this was inappropriate because the City of Berkeley's ordinance included requirements for actual upgrades and the City of San Diego's ordinance would not. Because the CAP is a plan-level document, the details of the specific ordinance called for under Action 1.4 has not yet been drafted. To ensure the appropriate reductions are achieved from this action, the City would monitor the CAP's implementation. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

Response to Comment AD-33

Regarding General Plan consistency, please see Response to Comment AD-5.

Comment Letter AD

disadvantaged, and disenfranchised populations and therefore is inconsistent with General Plan's commitments to:

- Improve mobility and accessibility for the non-driving elderly, disabled, and low income populations; (LU-I.10)
- Prioritize and allocate city resources to ensure disenfranchised communities with the greatest need have access to public facilities and services; LU-I.3, LU-I.4, and LU-I.6.
- Design transportation projects so that the resulting benefits and potential burdens are equitable; (LU-I.9.)
- Eliminate disproportionate environmental burdens and pollution experienced by historically disadvantaged communities; LU-I.13)

AD-33

In addition, Chapter 3 also does not adequately comply with the following General Plan policies:

- Provide adequate capacity and reduce congestion for all modes of transportation on the street and freeway system. (f) Evaluate RTP proposals for new or redesigned streets and freeways on the basis of demonstrated need and consistency with General Plan policies and community plan facility recommendations. (ME-C-2)
- Make transit planning an integral component of long range planning documents and the development review process. (ME-B.9)
- Use small, decentralized, and appropriately-sited energy efficient power. (CE-I.12)
- Coordinate City energy planning programs with federal, state, and regional agencies. Maximize energy efficiency, use of clean renewable resources, and demand response." (CE-I.2)
- Pursue investments in energy efficiency and direct sustained efforts towards eliminating inefficient energy use. (CE-I.7)
- Develop and implement sustainable building standards for new and significant remodels of residential and commercial buildings to maximize energy efficiency, and to achieve overall net zero energy consumption by 2020 for new residential buildings and 2030 for new commercial buildings. (CE-A.5)
- Require net-zero energy for new residential buildings by the year 2020 to meet the State's goal outlined in the Long-Term Energy Efficiency Strategic Plan. (HE-J.8)

AD-34

We urge the City resolve this inconsistency with the General Plan in the Final PEIR and Final CAP, by adopting the measures we recommend in the prior sections of our comments and our recommendations for the CAP below.

GHG SCREENING THRESHOLDS

The Single Use Development thresholds (Table 5, p. 25) are insufficient to ensure new development projects would not result in a significant GHG impact. First, the thresholds apply to all projects within a specified category regardless of whether they are consistent with the Climate Action Plan goals. Only after the screening criteria are applied is consistency with the CAP assessed. (Draft GHG Screening Criteria, p. 22). Thus, projects below the screening criteria could be located outside of the TPA and frustrate many of the CAP and City of Villages goals but progress without further review for GHG impacts because of the brightline thresholds.

AD-35

Further, in light of the incentive to meet the brightline thresholds, such developments may be favored, skewing historical patterns of development. Therefore, the use of historical building patterns (and associated emissions) to model brightline thresholds is inappropriate.

AD-36

Response to Comment AD-34

Regarding General Plan consistency, please see Response to Comment AD-5.

Response to Comment AD-35

Please see Response to Comment N-3.

Response to Comment AD-36

Please see Response to Comment N-3.

Comment Letter AD

We understand that the California Environmental Rights Foundation (CERF) has developed more extensive comments on the inter-related issues of the GHG Screening Criteria and use of the CAP for CEQA streamlining. EHC concurs with those comments and we urge the City to:

- Analyze the Screening Criteria in the DEIR itself;
- Develop Screening Criteria based on compliance with the CAP first, using thresholds derived from the CAP.

AD-37

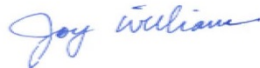
CONCLUSION

With the incorporation of Environmental Health Coalition's recommendations detailed in this letter and the previous Scoping comment letter, EHC hopes to be able to support the adoption of the City of San Diego Climate Action Plan. San Diego is long overdue to do its part to combat climate change, reduce air pollution, achieve social equity, and improve quality of life, health, economy and environment for all San Diegans. The emphasis of the CAP and the implementing ordinances must be on those communities that are most impacted by climate change and who have the fewest resources to adapt and achieve resilience.

Sincerely,



Diane Takvorian
Executive Director



Joy Williams
Research Director

Response to Comment AD-37

Please see Response to Comment N-3.

Comment Letter AE

BOULEVARD PLANNING GROUP

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September 29, 2015

TO: Mark Wardlaw, Director, San Diego County PDS via: Mark.Wardlaw@sdcounty.ca.gov and
 Rebecca Malone, Associate Planner, City of San Diego Planning Dept., via: DSDEAS@sanidiego.gov

FROM: Donna Tisdale, as Chair, Boulevard Planning Group; 619-766-4170; tisdale.donna@gmail.com &
 as an individual; PO Box 1275, Boulevard, CA 91905

RE: **San Diego Climate Action Plan Programmatic Draft EIR - SCH NO.: 2015021053¹**

The Boulevard Planning Group² is an elected volunteer land use advisory group, serving the predominantly low-income Boulevard Planning Area³ of rural East County, under the jurisdiction of San Diego County. County policy requires that we address comments directly to them with a copy to any non-County entities.

At our regular meeting held on September 3rd, our group voted unanimously to authorize me, the Chair, to submit comments on the City's CAP which includes reliance, in part, on large (industrial) scale renewable energy projects located outside the City's jurisdiction. Those unidentified and unanalyzed projects have the very real potential for significant, cumulative, and cumulatively considerable impacts within and adjacent to our Boulevard Planning Area and other rural low-income, groundwater dependent, and high fire risk communities that have been disproportionately targeted for renewable energy sacrifice zones and high-voltage utility corridors. These comments are limited and incomplete due to other obligations.

In general, we support realistic efforts to improve air quality, energy efficiency, and quality of life, while conserving water and other natural resources while avoiding disproportionate, significant, and cumulatively considerable adverse impacts for targeted communities and corridors.

We call your attention to the September 23rd article in the Voice of San Diego, *City's Bold Climate Action Plan Could be Nullified Before It Even Passes*⁴, that points to the SANDAG's position that the CAP numbers (to cut GHG emissions by 50% by getting more people to walk, bike, or take transit to work) are far-fetched, based on an analysis of how many people are likely to commute in 2035 that it conducted as part of the long-term transportation plan its board is expected to adopt next month.

AE-1

AE-2

¹ <http://www.sandiego.gov/planning/programs/ceqa/2015/153107-sdcapdraftpeir.pdf>

² <http://www.sandiegocounty.gov/content/dam/sdc/pds/docs/PG/BoulevardCPGfs.pdf>

³ <http://www.sandiegocounty.gov/content/dam/sdc/dplu/docs/GP/5-Boulevard.pdf>

⁴ <http://www.voiceofsandiego.org/topics/land-use/citys-bold-climate-action-plan-could-be-nullified-before-it-even-passes/>

Response to Comment AE-1

Comment noted.

Response to Comment AE-2

Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

Comment Letter AE
While we understand the good intentions related to your City's 100% renewable energy goals, from our perspective as a disproportionately targeted rural community, industrial wind and solar are not so clean and green. They can alter communities and quality of life for residents and wildlife.

AE-2



Based on our first-hand experience:

- Aggressive renewable energy goals generally require the disruptive and neighborhood-altering conversion of tens of thousands of acres of land/habitat and hundreds of miles of new high voltage utility lines; the use of hundreds of millions of gallons of our drought stressed sole-source groundwater, or potable water trucked in from the City of San Diego (70 miles away) to clear grade carbon sequestering chaparral, meadows, and soils (wildlife habitat); amended community plans—despite justified community opposition; altered public lands and regional recreation areas; increased fire ignition sources in our drought-stressed and underserved Very High Fire Hazard area; adverse impacts to public health and safety and emergency services; increased noise, low-frequency vibrations, electrical and light pollution; loss of productivity due to health impacts and sleep disruption, loss of views that support tourism; degraded quality of life and property values; impacts to wildlife, including sensitive and endangered species, and more.

AE-3

ES-1 Summary of Impacts and Mitigation Measures ES-6 2-1

A. Land Use:

- Mitigation Measure LU-1: Siting of Large-scale Renewable Energy Projects.
- This is just an inadequate plan to make a plan and does not apply to large-scale projects that may be sited outside City jurisdiction.
- This incomplete mitigation measure fails to include the required information / evidence to support the claim that it will reduce impacts to less than significant.

AE-4

CAP Strategy 2: Clean & Renewable Energy; Table 2-5 @ page 2-20 raises concerns for Boulevard and other rural communities targeted by renewable energy generators and SDG&E:

- The Potential Physical Changes to Environment section includes the following: "Would require the construction of distributed generation (small-scale renewable) on new and existing buildings, including solar photovoltaics, wind-turbines, and energy storage options. May directly or indirectly require the construction of large-scale renewable energy generation systems within our outside of the City to satisfy large demand. May therefore result in construction-related impacts (air quality, GHGs, traffic, noise) effects on visual quality (coastal views, hillsides, near

AE-5

Response to Comment AE-3

The programmatic-level impact analysis of implementation of CAP Action 2.1 is analyzed in the Draft EIR.

Response to Comment AE-4

As stated in Chapter 3.A, Land Use of the Draft EIR, the Mitigation Measure LU-1, Siting of Large-Scale Renewable Facilities, is expected to reduce land use impacts associated with siting of large-scale renewable facilities to a level below significance. While potential land use conflicts could occur outside of the City's jurisdiction, as stated in the Draft EIR, land use conflicts would either not occur or would have to be resolved by the applicable local agency, which would be considered in the environmental review for those proposed facilities. The analysis in the Draft EIR was appropriately limited to match the scope of discretion the City has authority to exercise in that the City would not have jurisdiction over any large scale renewable energy projects located outside of the City's jurisdiction. *See San Diego Navy Broadway Complex Coalition v. City of San Diego*, 185 Cal. App. 4th 924, 935-36 (2010). To provide further clarification, the text on Draft EIR page 3.A-20 has been revised as follows:

Significance after Mitigation

With implementation of Mitigation Measure LU-1, potentially significant land use conflicts from siting of large-scale renewable energy facilities would be avoided. In the case where projects are found to have the potential for conflicts, additional environmental review would be required to determine the significance of impacts, the potential for mitigating impacts, and to consider project alternatives that may reduce or avoid impacts. After mitigation, this impact would be less than significant. The physical impacts that could result from land use conflicts may be significant and unavoidable and those impacts are analyzed in Sections 3.B (Visual Effects and Neighborhood Quality), 3.C (Air Quality), and 3.F Transportation and Circulation.

Comment Letter AE

open space areas, scenic highways); footprint effects associated with Greenfield development, including biological, hydrologic, and cultural resource impacts.” (emphasis added)

- Point of use generation is much preferred over large-scale projects that can disrupt and degrade existing land uses and force unwelcome changes to hard-fought community plans and previously protected lands and resources, as discussed above.
- Boulevard has already been run through the wringer by wealthy and politically connected developers for multiple industrial scale wind, solar, and transmission projects.
- We are unwilling hosts and ask that you take that into consideration when making long-range decisions that can result in significant and cumulatively considerable adverse impacts—outside your jurisdiction. We have no vote and no representation on your Council.
- Against great odds, community efforts have successfully helped fend off three industrial wind turbine projects and numerous large solar projects and will continue to do what we can to defend our ruggedly beautiful area, our neighborhoods, and our rural quality of life.

From Governors’ Office of Planning and Research on CEQA & Climate Change:

- “Lead agencies must analyze potentially significant impacts associated with placing projects in hazardous locations, including locations potentially affected by climate change. (See CEQA Guidelines § 15126.2(a))”⁵
- **The CAP PDEIR fails to comply with this guidance from OPR**

Boulevard’s ruggedly beautiful McCain Valley National Cooperative Land and Wildlife Management and Recreation Area, in the photo (left) below (taken by the late Bill Parsons) has been approved for Iberdrola’s Tule Wind project, over strong community objections due to increased fire risk, noise, light and electrical pollution and impacts to residents, visitors, Golden Eagles, Bighorn Sheep and other wildlife. Litigation is pending in the 9th Circuit Court of Appeals. The photo on the right shows current backcountry night skies in Boulevard, the way we want to keep them!



The photos below show the Kumeyaay Wind turbine fire (before and after) that placed Boulevard and other communities at risk. Luckily, only one small ground fire was ignited by flaming debris from the composite turbine blades. Fire fighters said it would have been a different story if the fire had occurred the day before during a Santa Ana wind event.

⁵ http://opr.ca.gov/s_ceqaandclimatechange.php

Response to Comment AE-5

Please see Response to Comment AE-4. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting. At a time when a specific large-scale renewable energy facility is proposed, when there is sufficient detail to enable meaningful environmental review, the impacts associated with implementation of such a facility would be analyzed more fully.

Response to Comment AE-6

The comment appears to state that the Draft EIR should have included a discussion of the impacts associated with placing large scale renewable energy projects in hazardous locations. The CAP does not propose specific locations for the siting of large scale renewable energy facilities; rather, CAP Action 2.1, which is the implementation of a community choice aggregation program (CCA) or similar program, may result in construction of large scale renewable energy projects to provide the renewable energy under the CCA. That such a future project would result in placing that project in a hazardous location is speculative.

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Back in 2009, the Kumeyaay Wind facility experienced a catastrophic electrical failure that arced between all 25 turbines, resulting in loss of control and need to replace the majority of components on all turbines including all 75 turbine blades. The damaged blades sat on the ground for years while the turbine owners and operators sued each other. No explanation on the cause of the failure has ever been offered to the community. The turbines are located on tribal land leased from the Campo Kumeyaay Nation. Professional testing by Wilson Ihrig & Associates confirmed high levels of noise and infrasound inside surrounding homes on adjacent Manzanita tribal lands and private homes up to 5 miles distant. Similar results were documented in homes impacted by the Ocotillo Wind turbines located in Imperial County. Additional testing confirmed electrical pollution in the same homes and was linked to wind turbine operations.

The photo below documents the impacts from the FAA required red lights at the Ocotillo Wind facility that flash all night every night where residents of the tiny desert community of Ocotillo used to enjoy dark skies and quiet evenings void of the industrial blight and the health degrading electrical and light pollution that has been foisted on them. The energy serves SDG&E customers while Ocotillo's energy comes from Imperial Irrigation district. They are suffering through no fault of their own.



AE-6

Comment Letter AE

The photo below (left) shows the Ocotillo Wind turbines impact on historic Hwy S-2 adjacent to the Anza Borrego Desert State Park. The turbines are located on previously protected, culturally and biologically sensitive public land, surrounding the tiny Ocotillo community on three sides. The diagram on the right provides more perspective on the bulk and scale of industrial wind turbines. They are not compatible within miles of residential, recreation, or other sensitive areas/ receptors.



Soitec Solar- just one example of wasted public funds and increased electrical fire ignition sources that places local and distant resources at risk:

- Soitec Solar proposed 4 CPV projects, on almost 1,200 acres (2 square miles) in Boulevard
- **Soitec Solar's Emergency Services Capabilities Assessment and Cumulative Impact Mitigation**⁶ report, dated 30 December 2013, was included in the PFEIR.
- The report identified a wildfire threat to all structures and communities to the west of the project in east and southeast San Diego County.
- SDCFA estimates that nearly 17,000 residences (and other structures) may be at risk of loss during a wind driven wildfire within this southeastern San Diego County wildfire corridor (County of San Diego 2011).
- San Diego County's unjustified approval of the Soitec project was recently overturned by the court for failure to recirculate the PFEIR after belatedly adding 160 cargo containers of batteries to Soitec's Rugged Solar project, and more. A recirculated PFEIR will be heard on October 14th.
- In January 2015, Soitec announced their exit from the solar business⁷.
- September 2011, they announced the sale of their Rancho Bernardo manufacturing facility⁸ that Mayor Jerry Sanders specifically expanded the San Diego Enterprise Zone for, back in 2011.
- Late 2014, SDG&E announced they had terminated all their Soitec Solar Power Purchase Agreements⁹, basically due to failure to perform.
- According to the Voice of San Diego, "Soitec's arrival was supposed to be a shining example that large-scale manufacturing was possible in San Diego after all. State, local and national leaders lined up to make Soitec a success. In the months following the 2011 announcement, the

AE-6

⁶ http://www.sandiegocounty.gov/content/dam/sdc/pds/ceqa/Soitec-Documents/Final-EIR-Files/Appendix_3.1.7-Emergency%20Service%20Capabilities%20Assessment.pdf

⁷ <http://finance.yahoo.com/news/soitec-soitec-exits-solar-system-154701464.html>

⁸ http://www.sddt.com/news/article.cfm?SourceCodes=20150910de&_t=Rancho-Bernardo-industrial-building-on-Via-Via-Esprillo-sells-Vfla-FVh8s

⁹ <http://www.greentechmedia.com/articles/read/CPV-Hopeful-Soitec-Latest-Victim-of-the-Economics-of-Silicon-Photovoltaics>

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company received a [\\$25 million grant](#) from the federal Department of Energy to expedite construction of its San Diego home and signed on for [state enterprise zone tax incentives](#). The city put its permits on fast-forward".¹⁰



Public Notice issues:

- At page 4 of 10, San Diego County Planning and Land Use should be corrected to their new title, San Diego County Planning and Development Services (PDS).
- At page 6 of 10 of the Public Notice, SDG&E is listed under the "Other Governments". SDG&E is a monopoly utility not a government entity
- We agree with the RECOMMENDED FINDING: "Pursuant to Section 15060(d) of the CEQA Guidelines, it appears that the proposed project could potentially result in significant environmental impacts to the following areas: Land Use, Visual Effects and Neighborhood Character, Air Quality, Greenhouse Gas Emissions, Historical Resources, Transportation and Circulation, Utilities, and Water Supply", and that these impacts cannot be mitigated to less than significant.
- The following topics, found to be not significant in Chapter 7, could prove to be very significant with physical changes to impacted rural communities and the natural environment: agricultural resources, biological resources, geologic conditions, health and safety and hazardous materials, hydrology and water quality, mineral resources, noise, paleontological resources, and public services and facilities.

CEQA Compliance issues:

- An EIR is supposed to inform public agency decision makers and the general public of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.
- In relation to large-scale renewable energy projects, the Draft PEIR fails to comply with CEQA Guidelines Section 15121, and the stated purpose of this PEIR to serve as an informational document that: "...will inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project"
- The PDEIR fails to include, analyze, and mitigate impacts to resources, the physical environment and related quality of life, in and around the Boulevard Planning Area and others, that may be impacted by large-scale renewable energy projects located outside City of San Diego jurisdiction.

¹⁰ <http://www.voiceofsandiego.org/2014/12/19/the-darling-of-san-diego-solar-manufacturing-is-on-its-death-bed/>
6 Boulevard Planning Group CAP PDEIR comments 9-29-15

Response to Comment AE-7

The comment states that the CAP could have significant impacts with respect to topic areas that were found not to be significant. However, no specific comment as to the adequacy of the Draft EIR is provided. Comment noted.

Response to Comment AE-8

Under CEQA, a Program Level EIR can function as a first-tier environmental document that assesses and documents the broad environmental impacts of a program with the understanding that a more detailed site-specific review may be required to assess future projects implemented under the program, pursuant to CEQA Guidelines Section 15168. The analysis contained in this EIR may also be used as a reference for subsequent environmental review of projects facilitated by implementation of the strategies and actions in the CAP. The series of actions analyzed in the Program Draft EIR includes all GHG reduction strategies and actions contained in the CAP. While the Program Draft EIR will identify potential impacts that would result from Project implementation, the analysis is not detailed to the level of site specificity as sufficient details to be able to conduct meaningful environmental review at that level are not currently available or known. The Program Draft EIR identifies a range of potential impacts resulting from implementation of the CAP and identifies mitigation measures that reduce identified potentially significant effects, as needed.

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- Climate Change predictions indicate that rural East County will be exposed to higher temperatures and increased fire risk, altered rain patterns, potentially reduced groundwater resources, and more.

Water Supply for large-scale projects are generally vastly underestimated and problematic overall, including SDG&E's under reported GHG impacts related to long-hauling up to 60 million gallons of potable water from City of San Diego:

- Precious potable from rural drought-stressed sole-source aquifers and San Diego City's supposedly restricted potable water sources are required for construction of large-scale projects.
- SDG&E's Sunrise Powerlink project long-hauled an undisclosed amount of potable water from the City of San Diego for construction of their \$1.9 billion project that spans over 100 miles.
- SDG&E's ECO Substation project, constructed east of Jacumba, long-hauled approximately 60 million gallons of potable water from the City of San Diego, according to the attached Water Supply report (November 2014) provided by the CPUC project manager.
- In a June 11, 2014, SDG&E's Minor Refinement Request Form informed the CPUC that the City of San Diego had increased their water availability for the ECO Substation project from 50 million gallons to 66.5 million gallons¹¹.
- In an earlier Minor Refinement Request, dated 9-20-13, SDG&E informed the CPUC that their original estimate of 30 million gallons (FEIR/EIS Water Supply Plan) was inadequate and they needed closer to 90 million gallons.¹²
- Page A-1 of SDG&E's 6-11-14 document includes the following information documenting 1.15 million miles assumed for GHG emissions:**
 - "MPR request #8 discussed that the mileage associated with water truck deliveries for the remainder of construction will remain less than the 1.15 million miles assumed in the Final EIR/EIS to be expended during the Project's period of peak demand (i.e., mass grading of the ECO Substation). As depicted in Attachment B: Mileage Summary, the use of an additional 16.5 million gallons of water trucked from the City of San Diego will not increase Project mileage beyond the 1.15-million-mile limit. Therefore, the miles associated with water truck deliveries from the City of San Diego will not increase from what was analyzed in the Final EIR/EIS and previously approved through MPR #8. As a result of the above discussion, the total emissions for the requested refinement will be consistent with what was analyzed in the Final EIR/EIS, and the requested refinement will not trigger an exceedance of the greenhouse gas emissions threshold. Therefore, the requested refinement will not result in a new, significant impact or a substantial increase in the severity of a previously identified impact to air quality, which was evaluated as significant and unavoidable (Class I) in the Final EIR/EIS, or to climate change, which was evaluated as less than significant (Class III) in the Final EIR/EIS."
- Corrections to SDG&E's Minor Project Refinement Report # 14 produced by a non-profit's attorney revealed the errors and misrepresentations that undercounted water use and mileage¹³:**

¹¹ http://www.cpuc.ca.gov/environment/info/dudek/ECOSUB/MPR%2014_SDG&E_Request.pdf

¹² http://www.cpuc.ca.gov/environment/info/dudek/ECOSUB/MPR_8_Request.pdf

Response to Comment AE-9

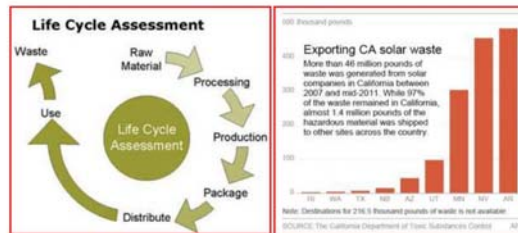
As specified in the CAP, on page 35, the City will “[c]omplete a citywide Community Choice Aggregation Feasibility Study” as part of the implementation strategy for Action 2.1. This feasibility study would consider some of the factors identified by the commenter. While it is possible that large scale renewable energy facilities may be constructed in the future that would provide renewable energy to a CCA under CAP Action 2.1, the specific locations of such facilities are not currently known. Please see Response to Comment AE-8.

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- SDG&E's water use through May 31, 2014 was undercounted by approximately 4million gallons (math error).
- The "Maximum Water Use Allowed" identified in SDG&E's Table 1 from MPRR 14 was misleading. Only 19.5 million gallons of water remained available for Project use as of May 31. It is now July and the water trucks are continuing.
- The total mileage for all water truck loads up to May 31 was undercounted by approximately 840,000 miles. The total mileage as of May 31, 2014 is 1,331,875 miles.
- By May 31, water trucked just from the City of San Diego had already exceeded the 1.15 million water truck miles available for project completion as analyzed in the Final EIR for green house gas impacts. The water trucked from the City of San Diego has exceeded this limit by 35,260 miles! The Project through May 31, 2014 is 181,875 miles over the 1.15 million mile limit.
- 439,718 additional truck miles and related green house gases are needed to truck the remaining 19.5 million gallons of water for the project through completion; this additional quantity further exceeds the 1.15 million mile limit.
- *When added together, the miles already used (1,331,875), and the miles required to haul the remaining water (439,718), represent an increase 621,593 miles over the 1.15 million mile limit. This total is more than 50% greater than the mileage cap, a substantial violation of this important restriction. (emphasis added)*
- The Water Supply Plan and water sources were not produced until after the close of public comment.
- Several of the sources had to be terminated due to lack of authority to sell water, failure to secure adequate approvals to sell water, and loss of groundwater recharge.
- *Rural East County has no access to imported water. The majority of residents rely on their own wells, at their own expense. Once our groundwater resources are drained or otherwise compromised, we have no real economically viable alternative.*

Scope of Environmental Analysis is inadequate

- The Life Cycle Assessments¹⁴ and impacts of all forms of renewable energy and increased transmission and any battery storage projects, and related recycling/disposal must be addressed and mitigated from cradle to grave. There are GHG impacts throughout their life cycles.



¹³ Letter from Law Offices of Stephan C. Volker to CPUC Project Manager Eric Chiang, July 17, 2014 (A.09-08-003)

¹⁴ <http://www.epa.gov/nrmrl/std/lca/lca.html>

Response to Comment AE-10

The purpose of the analyses contained in the Draft EIR is to measure the potential environmental impacts that are likely to result from implementation of the policies and reduction strategies contained in the CAP. The proposed CAP is a policy document that provides direction for how GHG emissions should be reduced within the City, and the analysis identifies the potential for implementation of those policies to cause physical changes to the environment.

Please see Draft EIR Section 3.D (Greenhouse Gases). The EIR assumes that implementation of proposed CAP actions could result in both construction-related and operations-related GHG emissions. However, as indicated in the discussion of expected GHG emissions reductions from implementation of the CAP on Draft EIR pages 3.D-17 and 3.D-18, these actions would also result in substantial long-term reductions in GHG emissions.

Comment Letter AE**Energy Resources section, relying on SDG&E's 2010 baseline information, is outdated and inadequate:**

- This section must be updated for fully informed public comments and decision making.
- *SDG&E issued a press release on August 25, 2015¹⁵ claiming they had "...achieved a new record of 1,042 megawatts (MW) of renewable energy generation on its power grid."* A combination of bright sunshine and strong wind conditions in the San Diego and Imperial Valley helped to generate record-setting amount of green energy for our customers" "We are proud to have delivered 33 percent renewable power over the last twelve months—the first utility to do so."
- *The 1,042 MW figure does not include the energy production by 61,000 SDG&E rooftop solar customers.*
- Just one month later, an additional 951 solar customers were added, according to SDG&E's Net Energy Metering (NEM) Dashboard website.
- *As of August 26, 2015, SDG&E's service area now includes 69,951 on-site solar installations with a total of 447.2 MW. They have 159.9MW remaining in their NEM Program cap¹⁶.*
- In addition, the Pio Pico, Carlsbad Energy Center and other natural gas powered peaker plants have been approved and/or constructed in SDG&E's territory and must be included in an updated Energy Resources section.
- To date, most renewable energy requires backup fossil fuel generation to balance the grid.
- Since 2010, numerous 500kV and other high voltage lines have been approved and / or constructed for SDG&E throughout San Diego County, including Boulevard and other rural communities. They are very disruptive.
- I took the photo below from Old Hwy 80 where a sky crane dropped one of the Sunrise Powerlink towers onto the ground during very disruptive construction operations. At one time SDG&E had approximately 40 helicopters in the air at the same time. It was devastating for impacted residents, livestock and wildlife. Helicopters were grounded for a period after a Golden Eagle was hit and knocked from the sky.



- Numerous large scale rural substations, including ECO Substation (right) and Suncrest Substation (left) have also been constructed in culturally, biologically, and visually sensitive areas of rural East County to help SDG&E import renewable energy from Imperial County, East County, and northern Baja California. The CAP will likely require additional infrastructure and impacts.

¹⁵ <http://www.sdge.com/newsroom/press-releases/2015-08-25/sdge-reaches-new-milestone-renewable-power-delivery>

¹⁶ <http://www.sdge.com/clean-energy/net-energy-metering/overview-nem-cap>

Response to Comment AE-11

Comment noted. Regarding the use of rooftop solar to provide renewable energy, it is assumed that some of the renewable energy under CAP Action 2.1 would also come from small-scale renewable projects. See for example Draft EIR page 2-21. Please also see Responses to Comments AE-8 and AE-9.

AE-11

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- In December 2014, SDG&E announced their Sunrise Powerlink project, completed in 2012, had reached their goal of 1,000 MW of renewable energy from 7 of 10 wind and solar contracts signed for projects in Imperial County¹⁷.
- Approximately 20,000 acres of Imperial County's productive farmland has already been approved or converted to industrial scale solar projects and another 12,000 or so acres of previously protected Limited Use land in California Desert Conservation Area has been converted to industrial wind energy for Ocotillo Express Wind¹⁸ project that surrounds the tiny desert town of Ocotillo, far too close and too noisy for residents and wildlife.
- The approved and/or already constructed solar projects total approximately 2,672MW of energy. These projects have displaced existing agricultural uses and related jobs and support businesses. Long-term employees and suppliers have been terminated.
- Maps of the industrial-scale solar/wind conversion are posted at Imperial County's PDS website @: <http://www.icpds.com/?pid=2934>
- *According to one construction company's website¹⁹, the 1,500 acre SolarGen 2 solar project in Imperial Valley required mass grading of 400,000 cubic yards of previously productive irrigated farmland (with senior water rights) and 85,000 lf of chain link fencing—not counting the millions of solar panels and racking, miles of conduit and more.* The life cycle of which are all energy intensive and likely consume fossil fuels at some point or another during their life cycle.
- Conversion of productive farmland also removes carbon sequestration from growing crops and the wildlife habitat in and around the fields, drains, and canals.
- Imperial County is part of the Pacific Flyway that attracts and supports a wide variety of resident and migrant avian species and more.
- Public comments made on September 22nd to Imperial County Board of Supervisors on their Renewable Energy Transmission Element, by Kay Pricola, Executive Director of the Imperial Valley's Coalition of Agriculture Labor and Business (COLAB)²⁰, raised concerns with inadequate reclamation bonding for agricultural land, the need to preclude the use of chemicals that are permanent soil sterilizers as a weed control effort because the impact to the soil and its surrounding area can never be repaired, the need to set a standard for solar panels to preclude

AE-11

¹⁷ <http://www.sdge.com/newsroom/press-releases/2014-12-18/sdge%E2%80%99s-sunrise-powerlink-reaches-1000-megawatt-renewable-energy>

¹⁸ <http://icpds.com/CMS/Media/Imperial-County-Wind-Power-10-31-13.pdf>

¹⁹ <http://www.cswcontractors.com/projects.asp?page=First+Solar+Gen+2>

²⁰ http://colabimperial.com/Board_Staff.html

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the use of any toxic materials, and that the employment projections for the recently approved solar projects were overstated.

- A copy of COLAB's comments are attached and incorporated by reference.

Planning Context is outdated:

- SANDAG's Regional Transportation Plan (2013) was rejected by the Court of Appeals as inadequate in late 2014²¹.
- Our comments on the revised RTP EIR (7-15-15) are attached and incorporated by reference. SANDAG's response to comments is inadequate.

Project Location & Description are inadequate:

- The PDEIR is inadequate. It fails to identify, analyze or mitigate for any large-scale renewable energy projects that may be relied upon to meet the proposed CAP but located outside the City's jurisdiction.

Project Objectives, listed below, do not address impacts from large-scale renewable energy projects:

- Improve public health by removing harmful pollutants from our air and improve water quality;
- Increase local control over the City's future by reducing dependence on imported water and energy.

The CAP is Growth Inducing

- See previous comments on large-scale renewable energy projects and utilities required to support CAP objectives.
- More energy and increased energy efficiency can support increased growth which, in turn, can require more energy.

Utilities

- While power lines in the City of San Diego are being undergrounded to enhance aesthetics and safety²², Boulevard and other rural communities have already been impacted, and will continue to be impacted, by large-scale regional electrical utility projects meant to serve the mostly urban customers of SDG&E, Southern California Edison, and other for-profit utilities.
- SDG&E's Sunrise Powerlink²³
- SDG&E's ECO Substation²⁴ with rebuild of Boulevard Substation and 14 miles of new 138kV line.
- I took these photos to compare the sharp contrast between what the overhead and underground sections of the ECO Substation lines look like. Note how tiny the construction trucks appear on the newly graded access road in the photo on the left. If not for the efforts of a local non-profit group's intervention at the CPUC, the entire route would have been overhead.

²¹ <http://www.ldsutra.com/legalnews/eir-for-sandags-regional-transportation-93351/>

²² <http://www.sdge.com/newsroom/press-releases/2014-12-18/sdge%E2%80%99s-sunrise-powerlink-reaches-1000-megawatt-renewable-energy>

²³ <http://www.sdge.com/newsroom/press-releases/2012-06-18/sunrise-powerlink-fact-sheet>

²⁴ <http://www.sdge.com/key-initiatives/eco-substation/eco-substation-project>

Response to Comment AE-12

This comment does not address the adequacy of the Draft EIR. Comment noted.

Response to Comment AE-13

Please see Responses to Comments AE-4, AE-5, AE-8, and AE-9.

Response to Comment AE-14

The purpose of the project objectives is to set forth the underlying purpose of the CAP. Please see Draft EIR Chapter 2.

Response to Comment AE-15

The CAP does not propose growth-inducing development, and would not induce growth in an area that is not already developed with infrastructure to accommodate such growth. Growth inducement is more fully discussed in Draft EIR Chapter 5.

Response to Comment AE-16

See Draft EIR Chapter 3.B regarding visual effects and neighborhood quality. Please also see Response to Comment AE-10.

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- SDG&E's Master Special Use Permit to upgrade lines and over 1,800 poles within and around the Cleveland National Forest, including conversion of 69kv lines in Boulevard to 138kv lines.²⁵

Estimated GHG Reduction Potential of Cap Strategies 2-5 2-2

- **Reliance on 2010 Baseline Emissions is inadequate due to the fact that the economy and emissions had not yet recovered from the Great Recession according to a report published in July 2015 *Nature Communications* 6, Article number: 7714 doi:10.1038/ncomms8714 : Drivers of the US CO₂ emissions 1997–2013²⁶ by Kulshuang Feng, Steven J. Davis, Laixiang Sun & Klaus Hubacek**
 - Abstract (emphasis added): "Fossil fuel CO₂ emissions in the United States decreased by ~11% between 2007 and 2013, from 6,023 to 5,377 Mt. This decline has been widely attributed to a shift from the use of coal to natural gas in US electricity production. However, the factors driving the decline have not been quantitatively evaluated; the role of natural gas in the decline therefore remains speculative. Here we analyse the factors affecting US emissions from 1997 to 2013. Before 2007, rising emissions were primarily driven by economic growth. After 2007, decreasing emissions were largely a result of economic recession with changes in fuel mix (for example, substitution of natural gas for coal) playing a comparatively minor role. Energy–climate policies may, therefore, be necessary to lock-in the recent emissions reductions and drive further decarbonization of the energy system as the US economy recovers and grows."

Air pollution & Particulate Matter increase with large-scale wind, solar and transmission projects

- In San Diego County, dust is largest PM10 source²⁷;
- Major issue for large-scale wind and solar projects that remove existing chaparral, disturb soil crusts, and create new sources of dust and other air pollutions
- EPA basic PM information²⁸;

²⁵ <http://www.sdge.com/key-initiatives/cleveland-national-forest-power-line-replacement-projects>

²⁶ <http://www.nature.com/ncomms/2015/150721/ncomms8714/full/ncomms8714.html>

²⁷ http://www.epa.gov/cgi-bin/broker?_service=data&_debug=0&_program=dataprog.state_1.sas&pol=PM10_PRI&stflps=06

²⁸ <http://www.epa.gov/airquality/particulatepollution/basic.html>

Response to Comment AE-17

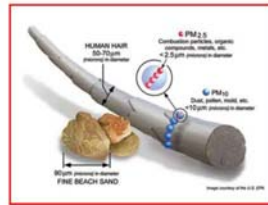
The CAP has been developed in response to State legislation and policies that are aimed at reducing California's greenhouse gas (GHG) emissions. Please see Response to Comment J-1. When the City set its 2020 and 2035 targets pursuant to CARB's guidance, 2010 was the most recent year for which the City had data.

Response to Comment AE-18

Please refer to Draft EIR Chapters 3 and 5 for discussions regarding potential environmental effects from implementation of CAP Action 2.1.

Comment Letter AE

- Particle pollution (also called particulate matter or PM) is the term for a mixture of solid particles and liquid droplets found in the air. Some particles, such as dust, dirt, soot, or smoke, are large or dark enough to be seen with the naked eye. Others are so small they can only be detected using an electron microscope.

How Big is Particle Pollution?²⁹

- Particle pollution includes "inhalable coarse particles," with diameters larger than 2.5 micrometers and smaller than 10 micrometers and "fine particles," with diameters that are 2.5 micrometers and smaller. How small is 2.5 micrometers? Think about a single hair from your head. The average human hair is about 70 micrometers in diameter – making it 30 times larger than the largest fine particle.
- These particles come in many sizes and shapes and can be made up of hundreds of different chemicals. Some particles, known as *primary particles* are emitted directly from a source, such as construction sites, unpaved roads, fields, smokestacks or fires. Others form in complicated reactions in the atmosphere of chemicals such as sulfur dioxides and nitrogen oxides that are emitted from power plants, industries and automobiles. These particles, known as *secondary particles*, make up most of the fine particle pollution in the country.
- EPA regulates inhalable particles (fine and coarse). Particles larger than 10 micrometers (sand and large dust) are not regulated by EPA.
- Health:** Particle pollution contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. The size of particles is directly linked to their potential for causing health problems. Small particles less than 10 micrometers in diameter pose the greatest problems, because they can get deep into your lungs, and some may even get into your bloodstream.
- Visibility:** Fine particles (PM_{2.5}) are the main cause of reduced visibility (haze) in parts of the United States, including many of our treasured national parks and wilderness areas.
- Reducing particle pollution:** EPA's national and regional rules to reduce emissions of pollutants that form particle pollution will help state and local governments meet the Agency's national air quality standards.
- Health Effects:** Particle pollution - especially fine particles - contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health

AE-18

²⁹ <http://www.epa.gov/airsceince/air-particulate-matter-image.htm>

Comment Letter AE

problems. Numerous scientific studies have linked particle pollution exposure to a variety of problems, including:

- premature death in people with heart or lung disease,
 - nonfatal heart attacks,
 - irregular heartbeat,
 - aggravated asthma,
 - decreased lung function, and
 - Increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing.
- People with heart or lung diseases, children and older adults are the most likely to be affected by particle pollution exposure. However, even if you are healthy, you may experience temporary symptoms from exposure to elevated levels of particle pollution. For more information about asthma, visit www.epa.gov/asthma.
<http://www.epa.gov/airquality/particlepollution/health.html>
 - EPA health risk from Airborne particles including dust: Small particles of concern include "fine particles" (such as those found in smoke and haze), which are 2.5 micrometers in diameter or less; and "coarse particles" (such as those found in wind-blown dust), which have diameters between 2.5 and 10 micrometers³⁰.
 - **COARSE PARTICLES AND HEALTH**
 - A particle that is 10 micrometers in diameter is extremely small and can get past the respiratory system's natural defenses (the nose and throat). For comparison, the diameter of an average human hair is about 50-70 micrometers – five to seven times larger than the largest coarse particle.
 - Scientific studies have linked exposure to coarse particles to a variety of health problems, including hospital admissions for heart disease, hospital admissions and doctors' visits for respiratory diseases, increased respiratory symptoms in children and premature death in people with heart or lung disease

AE-18

Valley Fever: Disease rides the dust of American Southwest³¹

- Health officials say that in this siege at least 6,000 people statewide have been infected with the fungus found in the arid soils of Central and Southern California, Arizona, New Mexico and Texas. About 50 Californians have died since August 1991. A typical year sees 441 cases and six deaths statewide.
- Most who take ill suffer from flu-like symptoms. But for some, the disease spreads beyond the lungs and can lead to a deadly form of meningitis. A pregnant woman dying of valley fever in Los Angeles was kept alive on a ventilator until doctors could deliver her baby. A doctor at the University of California, Davis, Veterinary Hospital succumbed after performing an autopsy on a horse that carried valley fever.... The fungus that causes valley fever is known by the name *Coccidioides immitis* -- or cocci (pronounced "coxy") for short.

AE-19

³⁰ <http://www.epa.gov/airquality/particlepollution/pdfs/pm-color.pdf>

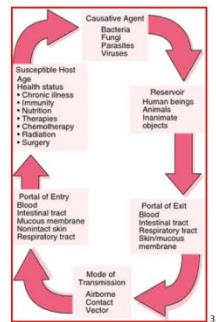
³¹ http://articles.baltimoresun.com/1992-12-23/news/1992358125_1_valley-fever-coccidioides-immitis-fungus

Response to Comment AE-19

This comment does not address the adequacy of the Draft EIR. Comment noted.

LETTER

RESPONSE



Comment Letter AE

AE-19

Thank you for consideration of these limited comments. Any errors or omissions are unintentional.

³² <http://medical-dictionary.thefreedictionary.com/dustborne+infection>



Comment Letter AF

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September 29, 2015

Rebecca Malone
Associate Planner
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1222 First Avenue MS 501
San Diego, CA 92101

Via Electronic Mail
DSDEAS@sanidiego.gov

Re: City of San Diego Climate Action Plan (CAP), SCH No. 2015021053
CERF Comments on DEIR and CAP

Dear Ms. Malone:

Please accept the following comments on behalf of our client Coastal Environmental Rights Foundation (CERF), a nonprofit environmental organization established to aggressively advocate, including through litigation, for the protection and enhancement of coastal natural resources and the quality of life for coastal residents.¹

First, we applaud the City for drafting a Climate Action Plan (CAP) with aggressive goals to achieve greenhouse gas (GHG) reductions that comply with State targets. We also understand the City's desire to streamline California Environmental Quality Act (CEQA) review for projects based on bright-line thresholds. However, as currently drafted, the City's Draft GHG Emissions Screening Criteria (Screening Criteria) potentially undermine the City's GHG reduction goals, the CAP, and the City of Villages planning approach.

As detailed below, the City's Screening Criteria may also result in a significant impact on the environment which has not been addressed in the CAP DEIR. We therefore urge the City to modify the Screening Criteria to further the City's goals and comply with CEQA.

I. The Screening Criteria Are Part of the CAP Project

Admittedly the CEQA Project under review is the City's CAP. However, to achieve the necessary reductions and enable CEQA streamlining, the CAP includes a CAP Consistency Checklist (Checklist). (DEIR, p. 2-18). The DEIR examines both the CAP and the associated Consistency Checklist, but describes the Screening Criteria as a mere "companion document." (DEIR, p. 2-18). However, the Screening Criteria are part and parcel with the CAP and are necessary to reduce the City's GHG emissions and ensure the State reduction goals are met: "The Screening Criteria will be used in conjunction with the City's Climate Action Plan Consistency Checklist to determine if a project has a cumulatively significant impact on greenhouse gas emissions." (Screening Criteria, p. 6).

Because the Screening Criteria are part of the "Project," the City's failure to consider the impacts of the Screening Criteria in the DEIR results in piecemealing. (CEQA Guideline §15378(a) [defining "project" broadly as "whole of an action..."]; see also, *Berkeley Keep Jets Over the Bay*

¹ CERF's comments on a prior version of the Climate Action Plan are attached hereto as Exhibit A. The CAP's water supply analysis continues to rely on outdated water usage metrics and therefore results in artificial GHG reductions. CERF therefore incorporates its prior comments on water supply reductions.

AF-1

Response to Comment AF-1

Please see Response to Comment N-3

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Com. v. Board of Port Cmrs. (2001) 91 Cal.App.4th 1344, 1358, [It is well settled that "CEQA forbids 'piecemeal' review of the significant environmental impacts of a project."]. Both the CAP and the Screening Criteria should therefore be subject to environmental review. (*Sierra Club v. County of San Diego* (2014) 231 Cal.App.4th 1152, 1171-1172).

AF-1

Further, a key CAP project objective is to provide CEQA streamlining for GHG emissions for new developments. (DEIR, p. 2-2). The CAP is meant to serve as a tiering and streamlining document pursuant to CEQA Guideline Section 15183.5. However, as part of the streamlining mechanism, the Screening Criteria were not analyzed in the DEIR:

Through 2020, the CAP meets the requirements set forth in CEQA Guidelines Section 15183.5, whereby a lead agency (e.g. the City of San Diego) may analyze and mitigate the significant effects of GHG emissions at a programmatic level, such as in a general plan, a long range development plan, or a separate plan to reduce GHG emissions. Following adoption of the CAP, eligible individual projects preparing project-specific environmental documents may tier from and/or incorporate by reference the CAP's programmatic review of GHG impacts in their cumulative impacts analysis by using the CAP Compliance Checklist (Appendix A of the CAP) and the GHG Emissions Screening Criteria. (Public Notice, p. 2, emphasis added).

AF-2

CEQA Guideline Section 15183.5 requires more. A qualified Greenhouse Gas Reduction Plan "should" be adopted in a public process following environmental review and may be used for cumulative impacts analysis "once adopted following certification of an EIR..." (CEQA Guideline Section 15183.5(b)(1)(F) and (2)).

Indeed, the City's screening process for new developments shows the significance of the Screening Criteria to the City's evaluation of GHG impacts. First, a project is reviewed pursuant to the Screening Criteria. (Screening Criteria, p. 7). Only if a project is above the thresholds in the Screening Criteria would the project be assessed for CAP consistency through the Checklist. (*Id.*). Therefore, a variety of relatively large and expansive projects – regardless of their location or project-specific elements – would evade CEQA review and would not be evaluated for consistency with the CAP. This is improper. Not only has the impact of such an approach not been subject to CEQA review, it directly undermines the purpose of the CAP as a CEQA streamlining document.

II. The Screening Criteria Use An Improper Methodology

As a companion to the CAP, and as a first step in assessing a Project's cumulative impacts, the Screening Criteria fail to ensure consistency with the CAP. The Screening Criteria thresholds were established by using the Statewide land use emissions and extrapolating the necessary 2020 reduction associated with land use-driven sectors. (Screening Criteria, p. 15). This reduction percentage was then purportedly applied to the City's 2020 projected GHG inventory. (*Id.* at p. 16). However, the Statewide land use-driven sector reductions should not simply be extrapolated to the City. Admittedly, the City's GHG emission sectors do not parallel the State's. (*Id.*, pp. 9-10). For example, the transportation sector accounts for 37 percent of total GHG emissions in the State, while it accounts for considerably more – 54 percent – of the City's emissions. (*Id.*). Thus, the City's land use-driven reductions should likely account for a greater percentage of needed reductions.

AF-3

Further, the Screening Criteria appear to use the City's 2010 baseline emissions instead of the projected 2020 emissions in calculating the necessary land use-driven reductions. (See,

AF-4

Response to Comment AF-2

Please see Response to Comment N-3.

Response to Comment AF-3

Please see Response to Comment N-3.

Response to Comment AF-4

Please see Response to Comment N-3.

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Screening Criteria, p. 10, Table 2 [13.02 MMT CO₂e is 2010 baseline]; compare, *Id.* at p. 20 [13.02 MMT CO₂e identified as 2020 forecast emissions]).

After extrapolating the necessary land use-driven reductions, the Screening Criteria apportion the necessary reductions between new and existing development based on the CAP. (*Id.* at p. 20). From there, the Screening Criteria model the number, size, and type of projects necessary to meet the aggregate emission reduction for new development. (*Id.*, p. 22). However, such an approach relies on CAP reduction strategy measures being apportioned to new development without requiring consistency with the CAP until and unless a project exceeds the screening criteria. Moreover, the CAP's goals to focus development in the TPA would be frustrated by the brightline threshold which does not account for a project's location or site-specific constraints.

The Screening Criteria should therefore be amended to require consistency with the CAP first and rely on a threshold derived from the CAP, not piecemealed by using statewide and local figures.

III. In Conjunction with the CAP, the Screening Criteria Must Mitigate Greenhouse Gas Impacts For the General Plan

In 2008, the City updated its General Plan and certified a Program Environmental Impact Report (PEIR) prepared in conjunction with the Plan. In response to public concern regarding the General Plan's contribution to climate change, the City strengthened its GHG mitigation policies in the General Plan itself, and made them enforceable through the Mitigation Monitoring and Reporting Program (MMRP). (Report to City Council February 27, 2008, p. 8; see also, Final PEIR, p. 5-31).

The PEIR itself reiterates the City's commitment: "The overall intent of these new policies is to unequivocally support climate protection actions, while retaining flexibility in the design of implementation measures which could be influenced by technological advances, environmental conditions, state and federal legislation, or other factors." (PEIR, pp. 5-31-32). The City's General Plan Action Plan also includes the short-term action to "expand the scope of the Climate Protection Action Plan to include measures to reduce GHG emissions from the community-at-large;" and the ongoing action of "comprehensively address[ing] climate change through the implementation and actions associated with the individual policies identified in Table CE-1 in the General Plan." (General Plan Action Plan July 2009, pp. 26, 28).

The MMRP likewise outlines mitigation measures for the General Plan impacts to global warming. "The purpose of the MMRP is to ensure that the updated San Diego General Plan... complies with all applicable environmental mitigation requirements." (General Plan MMRP, p. 1, pp. 49-50). The General Plan Monitoring Report likewise states: "The City is in the process of preparing a [CMAP]. The CMAP is a companion document to the General Plan and was prepared in accordance with Policy CE-A.13." (General Plan Monitoring Report, p. 2-4; see also, Report to City Council, July 25, 2013, p. 1 ["The City's General Plan [PEIR MMRP] specifically requires the mitigation of climate change."]). The City committed to preparing a Climate Action Plan that both mitigates the General Plan GHG emissions, and at a minimum, complies with applicable laws. (See CE-A.1, CE-A.2, CE-A.13).

Thus, the CAP serves as mitigation for the General Plan and must meet State reduction targets. Indeed, one of the CAP's objectives is to "[i]mplement climate action policies of the General Plan" and the CAP itself reiterates that it serves as mitigation for the General Plan. (DEIR, p. ES-2; CAP, p. 4). As mitigation for the General Plan, the CAP must be enforceable. "Mitigating conditions are not mere expressions of hope." (*Lincoln Place Tenants Assn. v. City of Los Angeles*, (2005) 130

AF-5

AF-6

Response to Comment AF-5

Please see Response to Comment N-3.

Response to Comment AF-6

Please see Response to Comment N-3.

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Cal. App. 4th 1491, 1508). "When mitigation measures are incorporated in a plan, the agency must take steps to ensure that they will actually be implemented as a condition of later development approved under the plan, 'not merely adopted and then neglected or disregarded.'" (2 Kostka & Zischke, Practice Under the Cal. Environmental Quality Act, §14.16 (rev. 3/13), citing *Federation of Hillside & Canyon Associations v. City of Los Angeles*, (2000) 83 Cal. App. 4th 1252, 1261).

Executive Order S-3-05, issued in 2005, committed the State to reducing its GHG emissions to 1990 levels by 2020, and to 80 percent below 1990 levels by 2050. Consistent with the objective of the Executive Order, the Legislature followed with the Global Warming Solutions Act of 2006, commonly known as AB 32. (Health & Saf. Code, §§ 38500, *et seq.*). AB 32 requires emission levels be reduced to 1990 levels by 2020. (Health & Saf. Code, § 38550). However, the AB 32 Scoping Plan acknowledges the 2020 goal is an interim step towards the further reductions set out in the Executive Order. Likewise, recently approved Executive Order B-30-15 further established an interim 2030 statewide GHG reduction target of 40 percent below 1990 levels.

Thus, as acknowledged in the CAP and as evidenced by its interim 2035 goal, reduction measures are necessary not only to meet the 2020 goals, but also to continue progress to the ultimate 2050 goal. However, despite the fact that the CAP and the Screening Criteria are meant to function as tiering documents for new development through 2020 only, they frustrate the City's interim goal and the ultimate 2050 goal.

The CAP and Screening Criteria allow development projects approved between now and 2020 (and built beyond 2020) to (1) avoid CEQA review for GHG emission impacts altogether if the project falls below the Screening Criteria thresholds; and (2) only demonstrate consistency with the 2020 target. New development projects undergoing review between now and 2020 will continue to emit GHGs well beyond 2020. Indeed, the Screening Criteria and current GHG emission models amortize construction emissions over an assumed 20-year life of new development projects. Therefore, most – if not all – projects approved using the Screening Criteria as thresholds of significance will continue past the City's interim target without any additional mitigation measures to achieve the necessary additional reductions for 2035 and beyond.

The Screening Criteria therefore undermine the CAP's 2035 target. Further, because the Screening Criteria are designed to help achieve and implement the CAP goals, use of the Screening Criteria will fail to ensure the CAP adequately mitigates GHG impacts of the General Plan.

IV. SANDAG's Regional Plan May Frustrate the CAP

Recent analysis has shown the SANDAG Regional Plan may frustrate the City's CAP GHG reduction goals.² Therefore, it is important for the public and decision-makers to know the extent to which the City CAP relies on SANDAG for CAP implementation. This is not clearly articulated in the CAP, though it is clear some reliance on SANDAG is contemplated:

Some of the implementing actions of the CAP may involve other agencies, such as SANDAG, concerning expanded transit service, but such actions will require project-level CEQA evaluation at which time such agencies would be involved as a lead or approving agency." (DEIR, p. 2-19, emphasis added).

"Based on current transit mode share in TPAs, the City planners and transportation engineers we consulted anticipate that by prioritizing these areas for transit

2

<http://www.voiceofsandiego.org/topics/news/morning-report-sandag-transit-plan-could-undercut-the-city/>

Response to Comment AF-7

Please see Response to Comment N-3.

Response to Comment AF-8

CAP actions are expected to achieve an increase in commuter transit (peak period) mode share in 2020 and 2035 that will exceed the regionally projected transit mode share for those years. See CAP Appendix pages A-31 through A-35. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

Response to Comment AF-9

Please see Response to Comment AF-8.

AF-6

AF-7

AF-8

AF-9

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improvements, it will be possible to achieve 12% commuter transit (peak period) mode share in 2020 and 25% commuter transit (peak period) mode share in 2035 in these high density areas. These goals are 4.2% greater than the regionally projected transit mode share for 2020 and 13% greater for 2035." (CAP Appendix B-30)

↑
 AF-9

In light of the gap between SANDAG's projections and the City CAP – and the need to achieve the CAP's 2020 transportation goals before SANDAG approves a new Regional Plan or RTP – the CAP should make clear what agency is responsible for filling this gap. It is clear from these figures that at the very least, SANDAG's approval of a weak Regional Plan will either directly undermine the City's CAP, or compel the City to make substantial improvements to meet the CAP transportation goals *despite* SANDAG. Under either scenario, SANDAG's role in the CAP should be clearly articulated.

↑
 AF-10

V. Conclusion

CERF urges the City to amend the Draft GHG Screening Criteria to serve as mitigation measure to the General Plan and aid the City in streamlining CEQA review for future development projects. Further, as part of the CAP Project, the Screening Criteria should be analyzed in the DEIR. Should the City fail to make these changes, the CAP and the City's associated environmental review will fail to comply with CEQA.

Thank you in advance for your consideration of our comments.

Sincerely,

COAST LAW GROUP LLP

Marco A. Gonzalez
 Marco A. Gonzalez

Livia Borak
 Livia Borak
 Attorneys for CERF

Enc.: Exhibit A. CERF Comments.CMAP.10.1.2012

Response to Comment AF-10

Please see Response to Comment AF-8.

Comment Letter AG



September 29, 2015

Rebeca Malone
Associate Planner
City of San Diego Planning Department
1222 First Avenue, MS 501
San Diego, CA 92101
E-mail: DSDEAS@san-diego.gov

Via E-mail, to the email shown above

Subject: San Diego Climate Action Plan SCH NO. 2015021053, Its Draft PEIR and the Companion Screening Criteria for Greenhouse Gas Emissions Under the California Environmental Quality Act

Dear Ms. Malone:

We appreciate the opportunity to communicate with you concerning this important topic. We will primarily restrict our comments to transportation related matters, the adequacy of targets, the adequacy of the explanation of our climate crisis, the adequacy of the explanations of the subject document's transportation-related strategy outcomes, and the basis and conclusions of the screening criteria.

We appreciate the subject's commitment to Community Choice Energy (Community Choice Aggregation), net-zero buildings, and 100% renewable energy by 2035. Still, given the urgency of our climate crisis and the need to set an example for other cities, states, and countries, we will always urge the acceleration of all programs, goals, and achievements in these critical areas. From Reference 1, for California (but in truth this is applicable to all governments, including the government of San Diego):

Reaching our ultimate objective—reducing California's greenhouse gas emissions to the scientifically recognized level necessary for climate stabilization— will require California to keep building on the framework by continuing to pursue the maximum technologically feasible and cost-effective actions that will steadily drive down greenhouse gas emissions over the coming decades.

STATE MANDATE TARGETS SHOWN IN CAP CHAPTER 2, PAGE 21, TABLE 2.1 AND DRAFT PEIR PAGE 2-5, TABLE 2-1 AND THE INADEQUACY OF THE REDUCTIONS CLAIMED

Table 2.1 (both in the CAP and in the draft PEIR) is correct, for year 2020. It is important to note that it is based on an assumption that the baseline year (2010) value of 13,019,591 must be reduced by 15% to get to the Executive Order S-3-05 (same as AB 32) value, which is the 1990 value of emission level. This is shown as 11,066,652. This is true because 13,019,591 (the baseline year value), multiplied by the factor of 0.85, equals exactly 11,066,652. It is our

AG-1

AG-2

Response to Comment AG-1

Comment noted.

Response to Comment AG-2

Please see Response to Comment J-1.

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understanding that the state allows this convention because many municipalities would not be able to determine their 1990 GHG emission values. However, for 2030, the CAP makes an error, because Executive Order B-30-15 ("B-30-15") requires that the 2030 value be 40% below the 1990 value, not 40% below the baseline value of year 2010.

Table 1 of this letter shows all of the factors and all of the emission target values that are important to the question of whether or not the CAP's purported reductions support our state's climate mandates: Executive Order S-3-05 ("S-3-05") and Executive Order B-30-15 ("B-30-15"). The basis for the factors is shown in the Column 5, with additional notes, as needed, shown in Column 6. Both the correct and incorrect calculations are shown, resulting in the CAP's correct 2020 target as well as the CAP's incorrect 2030 target and the CAP's obsolete (because it fails to account for B-3-05) 2035 target. The correct targets for 2030 and 2035 are also shown, including a description of how they are computed. The CAP is unfortunately using the incorrect 2030 value shown in Row 7 and the incorrect 2035 target of Row 12. The incorrect 2035 target value of Row 12 would have been acceptable, before B-30-15, since it is less than the obsolete (pre B-30-15) target value of 2035. However, since B-30-15 now defines the 2030 target value and S-3-05 still defines the 2050 value, there is no basis for not assuming that the correct 2035 target value is not defined by the linear glide path between those points, as shown in Table 1. What matters is the area under the glide paths assumed, because that area is the net CO₂ placed into the earth's atmosphere. There is no basis for an assumption that the B-30-15 target would have no effect on the 2035 target.

Table 2 of this letter shows emissions and targets, leading to the margin's achieved. Unfortunately, using the claimed or purported emissions after this CAP is executed (Row 5 of Table 2) results in a negative margin, for years 2030 and 2035. Therefore, the CAP and its draft PEIR will need to be amended and reissued to show how positive margins could be achieved. Failing to even achieve the state's climate mandates, when considered in the cumulative impact sense, is to most certainly contribute to the destabilization of the earth's climate. As will be shown, this is an unacceptable outcome. This work will therefore need to be corrected and the subject documents will need to be reintroduced to the review process.

Since the 2030 and 2035 margins are negative, this means that the CAP results will interfere with and not support the achievement of S-3-05 and B-30-15. This also means that the GHG Section on Page ES-8 of the PEIR is incorrect. The adoption of this CAP will allow developments to go forward, increasing GHG, even though the CAP is known to fail to support S-3-05 and B-30-15. The GHG section shown on that Page ES-8 needs to show the need for additional mitigations and that the level of significance exceeds any reasonable, science-based threshold. This is the opposite of what is currently shown.

THE DEFINITION OF CLIMATE DESTABILIZATION, THE OMISSION OF THIS DEFINITION IN THE SUBJECT DOCUMENTS, AND WHY THIS OMISSION VIOLATES CEQA LAW

CEQA law requires that negative impacts be considered. Climate destabilization is a negative impact that could occur, given cumulative effects, if the subject documents fail to produce sufficient reductions in greenhouse gas (GHG) emissions. ***Since climate destabilization must be considered, it must be defined.*** To define climate destabilization, the essence of our climate crisis must be explained. The subject documents have material on legislative background related to our climate crisis. However, that material falls far short of what decision-makers and members of the public need to know in considering the adequacy of the proposed actions.

AG-2

AG-3

AG-4

AG-5

AG-6

Response to Comment AG-3

Please see Response to Comment J-1.

Response to Comment AG-4

Please see Responses to Comment J-1.

Response to Comment AG-5

Please see Responses to Comment J-1.

Response to Comment AG-6

Please see Response to Comment AG-8.

Comment Letter AG

Table 1 Factors Based on S-3-05, B-30-15, and the Calculation of the State's Climate Mandated Targets, Using the 2010 Baseline and the Assumption that the 1990 Level (Which is the 2020 Target) is 15% Less than the 2010 Baseline

Row	Name	Value	Computed As	Basis	Note
1	Factor 1	0.85	The 1990 value is 15% less than the 2010 Baseline Value	Assumption	The state allows this, since 1990 values may not be available.
2	Factor 2	0.6	The 2030 value is 40% less than the 1990 value, which is the 2020 Target	EO B-30-15	This takes precedent over EO S-3-05.
3	Factor 3	0.6	The 2035 value is 40% less than the 1990 value (2020 Target)	Linear Glide Path of EO S-3-05	This is now obsolete, due to EO B-30-15
4	Factor 4	0.2	The 2050 value is 80% less than the 1990 value (2020 Target)	EO S-3-05	It was hoped that this would support capping earth's atmospheric CO2e
5	Baseline	13,019,591	San Diego's 2010 emission	Inventory for 2010	None
6	Correct 2020 Target	11,066,652	1990 Level, Which is Baseline Multiplied by Factor 1	Computed as Described	None
7	Incorrect 2030 Target	7,811,755	The Baseline Multiplied by Factor 2	Computed as Described	None
8	Correct 2030 Target	6,639,991	The 2020 Target Multiplied by Factor 2	Computed as Described	None
9	Correct 2050 Target	2,213,330	The 2020 Target Multiplied by Factor 4	Computed as Described	None
10	Correct 2035 Target	5,533,326	The 2030 Value, Reduced by 25% of the Difference Between the 2030 Value & the 2050 Value	Computed as Described, which is a linear interpolation	This assumes a linear glide path between 2030 and 2050
11	Obsolete 2035 Target	6,639,991	The 2020 Target Multiplied by Factor 3	Computed as Described	This was correct before EO B-30-15.
12	Incorrect 2035 Target	6,509,796	The Baseline Multiplied by 0.50	Computed as Described	This was nearly correct, before EO B-30-15

Comment Letter AG

Table 2 Emission Values, State Mandated Targets (Both Correct and Incorrect), and Margins (Both Correct and Incorrect)

Row	Value Being Computed	Year		
		2020	2030	2035
1	2010 Baseline	13,019,591	13,019,591	13,019,591
2	Total Projected Emissions (BAU)	14,067,316	15,667,499	16,427,118
3	State Target Levels. However, the 2030 and 2035 are incorrect.	11,066,652	7,811,755	6,509,796
4	Reductions needed (but 2030 and 2035 are incorrect) These are Row 2 minus Row 3.	3,000,664	7,855,744	9,917,323
5	Total CO ₂ e Emissions. These values are typed in from Table 2.1 of the CAP.	9,791,894	7,635,226	6,382,661
6	Margins, or what Table 2.1 describes as "Additional Reductions Below State Targets." They are computed as Row 3 minus Row 5. However, the 2030 and the 2035 values are incorrect.	1,274,758	176,529	127,135
7	State Target Levels. These values are correct. They are taken from Rows 6, 8 and 10 in Table 1 of this letter.	11,066,652	6,639,991	5,533,326
8	Reductions needed. The 2030 and 2035 values are correct. These are Row 2 minus Row 7.	3,000,664	9,027,508	10,893,792
9	Margins, or what Table 2.1 describes as "Additional Reductions Below State Targets." They are computed as Row 7 minus Row 5.	1,274,758	-995,235	-849,335

Climate Change Background**Basic Cause**

Our climate crisis exists primarily because of these two facts²: First, our combustion of fossil fuels has added and continues to add "great quantities" of carbon dioxide (CO₂) to our atmosphere. Second, atmospheric CO₂ traps heat.

AG-7

California's First Two Climate Mandates

California's Governor's Executive Order S-3-05 is similar to the Kyoto Agreement and is based on the greenhouse gas (GHG) reductions recommended by climate scientists for industrialized nations, back in 2005³. In 2005, climate scientists believed that the reduction-targets of S-3-05 would be sufficient to support stabilizing Earth's climate at a livable level, with a reasonably high level of certainty. More specifically, this executive order aims for an average, over-the-year and over the earth, atmospheric temperature

AG-8

Response to Comment AG-7

Comment noted.

Response to Comment AG-8

The comment appears to suggest reduction targets that go beyond statewide reductions. As shown on CAP page 21, the CAP provides for reductions that exceed these statewide reduction targets. Specifically, the CAP provides for an additional 1,243,500 MT CO₂e in greenhouse gas reductions by 2020, 211,196 MT CO₂e in greenhouse gas emissions reductions by 2030 and 205,462 MT CO₂e in greenhouse gas emissions reductions by 2035.

Comment Letter AG

rise of "only" 2 degree Celsius, above the preindustrial temperature. It attempts to do this by limiting atmospheric CO₂ and other GHG denoted as "CO₂e", which includes other GHG besides CO₂ which has been converted to the units of carbon dioxide equivalency so they can be added to CO₂, which is herein represented as "CO₂e", to 450 PPM by 2050³. To be clear, the S-3-05 targets were thought to be sufficient to cap atmospheric CO₂e to 450 PPM by year 2050³. This "capping" requires that a CO₂e equilibrium equation be true. This equation is shown in the subsection below, *The Primary Threat of our Climate Crisis*. The S-3-05 emission targets are as follows: 2000 emission levels by 2010, 1990 levels by 2020, and 80% below 1990 levels by 2050.

As shown in Reference 3, with the use of its references, it was thought that if the world achieved S-3-05, there would be a 50% chance that the maximum temperature rise will be less than 2 degrees Celsius, thus leaving a 50% chance that it would be larger than 2 degrees Celsius. A 2 degree increase would put over a billion people on the planet into a condition described as "water stress" and it would mean a loss of 97% of our coral reefs.

There would also be a 30% chance that the temperature increase would be greater than 3 degrees Celsius. A temperature change of 3 degrees Celsius is described in Reference 3 as being "exponentially worse" than a 2 degree Celsius increase.

The second California climate mandate is AB 32, the so-called *Global Warming Solutions Act of 2006*. It includes provisions for a cap and trade program, to ensure meeting S-3-05's 2020 target of the 1990 level of emissions. It continues after 2020. AB 32 requires CARB to implement measures that achieve the maximum *technologically feasible and cost-effective* (words taken from AB 32) greenhouse-gas-emission reductions.

California is on track to achieve its second (2020) target. However, the world emission levels have, for most years, been increasing, contrary to the S-3-05 trajectory. Because the world has effectively failed to achieve S-3-05, California, if it still is interested in leading the way to human survival, must do far better than S-3-05, going forward.

California's More Recent Climate Mandate

Governor's Executive Order B-30-15 requires a single target: 40% below the 1990 level by 2030. Note that this target level is halfway between Executive Order S-3-05's 2020 target (which is equal to our 1990 emission level) and Executive Order S-3-05's 2050 target (80% below the 1990 level.) However, the 2030 target year is 5 years sooner than the halfway point between 2020 and 2050, which is 2035. This suggests that our Governor knows that the S-3-05 straight-line trajectory is not enough to stabilize the climate. These two governor's executive orders will be referred to as S-3-05 and B-30-15.

Failing to Achieve these Climate Mandates

If we fail to achieve S-3-05 and/or B-30-15, or if we achieve them but they turn out to be too little too late and other states and countries follow our example, the result will be catastrophic for most life forms on earth, including our own species.

It has been written⁴ that, "A recent string of reports from impeccable mainstream institutions-the International Energy Agency, the World Bank, the accounting firm of PricewaterhouseCoopers-have warned that the Earth is on a trajectory to warm by at

AG-8

AG-9

AG-10

Response to Comment AG-9

This comment does not address the adequacy of the Draft EIR. Comment noted.

Response to Comment AG-10

This comment does not address the adequacy of the Draft EIR. Comment noted. Please also see Response to Comment AG-8.

Comment Letter AG

least 4 Degrees Celsius and that this would be incompatible with continued human survival."

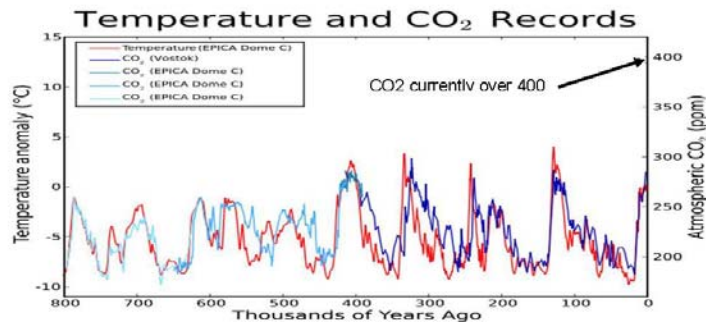
It has also been written⁵ that, "Lags in the replacement of fossil-fuel use by clean energy use have put the world on a pace for 6 degree Celsius by the end of this century. Such a large temperature rise occurred 250 million years ago and extinguished 90 percent of the life on Earth. The current rise is of the same magnitude but is occurring faster."

Pictures Showing Our Predicament

Figure 1 shows (1) atmospheric CO₂ (in blue) and (2) averaged-over-a-year-then-averaged-over-the surface-of-the-earth, world atmospheric temperature (in red). This temperature is with respect to a recent preindustrial value. The data starts 800,000 years ago. It shows that the current value of atmospheric CO₂, which is now over 400 PPM, far exceeds the values of the last 800,000 years.

Figure 2 shows the average yearly temperature with respect to the 1960-to-1990 baseline temperature (in blue). It also shows atmospheric levels of CO₂ (in red). The S-3-05 goal of 450 PPM (the intended maximum value) is literally "off the chart", in Figure 2. Figure 2 shows that, as expected, temperatures are starting to rise along with the increasing levels of CO₂. The large variations in temperature are primarily due to the random nature of solar energy being received by the earth. The rapid increase of atmospheric CO₂ from our 180-year-old industrial revolution is obvious.

Figure 1 Atmospheric CO₂ and Mean Temperature from 800,000 Years Ago



Primary Threat of Our Climate Crisis: Climate Destabilization

The primary threat of our climate crisis is that current and future, world-wide, yearly emission levels of CO₂e will put our planet into a condition which is best described as "climate destabilization". This is a condition in which the climate system's positive

AG-10

AG-11

AG-12

Response to Comment AG-11

This comment does not address the adequacy of the Draft EIR. Comment noted. Please also see Response to Comment AG-8.

Response to Comment AG-12

This comment does not address the adequacy of the Draft EIR. Comment noted. Please also see Response to Comment AG-8.

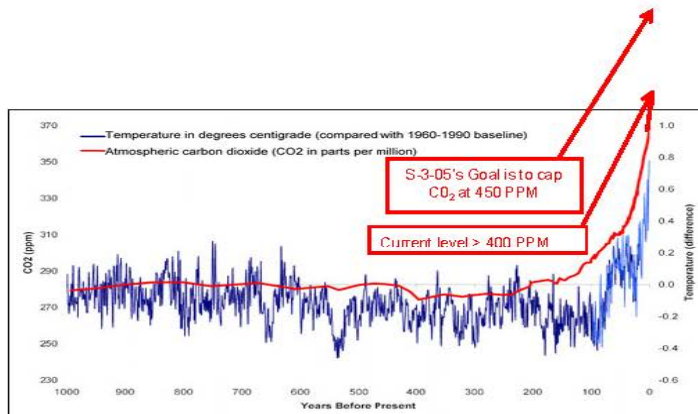
Comment Letter AG

feedbacks¹ become large enough to, even if we were to eliminate our CO₂e emissions, overwhelm the processes that remove carbon dioxide equivalent (CO₂e) gases from the earth's atmosphere, primarily the carbon sequestration of carbon dioxide (CO₂) performed by the photosynthesis of plant growth. "Climate destabilization" is also described as "going past the climate tipping point" and also sometimes described as "going over the climate cliff", or having "runaway climate change". It is best understood by an equation for the equilibrium of atmospheric CO₂e, mentioned above in the section titled *California's First Two Climate Mandates*. The following definitions are used:

- E_a is the anthropogenic (cause by human activity) emission of CO₂e, primarily caused by the combustion of fossil fuels.
- E_n is the emission of CO₂e from natural processes, such as respiration, digestion, decomposition of plant material, and fire.
- E_{pfb} is the "positive feedback" emission of CO₂e, which is an emission or emissions being caused by the earth's warming, such as the melting of our permafrost, releasing methane, which is a CO₂e gas
- S is the sequestration of carbon, or the removal of CO₂e from the atmosphere, from all processes but primarily from the photosynthesis of growing plants.

Equation 1: $E_a + E_n + E_{pfb} = S$

Figure 2 Atmospheric CO₂ and Mean Temperature Over the Last 1,000 Years



¹ If a process ("Process 1") sets in motion a second process ("Process 2") and if the second process (Process 2) adds to the first process (Process 1), then, the second process (Process 2) is said to be a "positive feedback" to the first process (Process 1).

AG-12

Comment Letter AG

When Equation 1 is true, that is, when the two sides of the equation are precisely equal, the atmospheric CO₂e is neither going up nor going down. The hope of S-3-05 was that this condition would be met in 2050 and that the atmospheric CO₂e would be at 450 PPM³. The level of our emissions, mostly CO₂ from the combustion of fossil fuel, was to have been at 80% below our 1990 level in 2050. If it is assumed that back in 2005 it was thought that the positive feedback term could be ignored, this means that the 2050 S-3-05 target (80% below the 1990 level) is equal to the natural removal of CO₂e (the "S" term) minus the natural addition of CO₂e (the E_n term). Of course if we want to bring the earth's temperature back down, what needs to happen is for the anthropogenic term to be small enough that the left side of the equation is smaller than the sequestration term, "S", creating a negative slope to the quantity of atmospheric CO₂e. This will still not guarantee that we can achieve climate stabilization because, at any time, the positive feedback term could increase to be larger than the sequestration term, "S" minus the natural emissions term, E_n. If this were to happen, it would be "game over", unless we can figure out a way to take CO₂e out of the atmosphere. We are in no position to assume some successful geoengineering solution.

Latest Official State Information on Climate Destabilization

What we need to achieve is the opposite of climate destabilization. We need to "stabilize the climate at a livable level". This will be referred to as "climate stabilization". It would start with stabilizing the atmospheric level of CO₂e. It would also require the atmospheric level of CO₂e coming down to a safe level, considering the threat of positive feedbacks becoming dangerously high.

The following revealing quotes (Quote 1 through Quote 4), come from Reference 1's Section B, *Achieving Climate Stabilization*. Even though the goal of S-3-05 was to support a world effort to aim at a 2 Degree Celsius change in temperature (achieving a 50% probability of keeping that temperature change below 2 Degrees but leaving a 50% probability of exceeding 2 degrees), there is this quote (emphasis added):

Quote 1:

Scientific research indicates that an increase in the global average temperature of 2°C (3.6°F) above pre-industrial levels, which is only 1.1°C (2.0°F) above present levels, poses severe risks to natural systems and human health and well-being

As stated in this letter and in Reference 3, the method of aiming for a 2 Degree Celsius change (achieving a 50% probability of keeping the temperature change below 2 Degrees but leaving a 50% probability of exceeding 2 degrees) is to cap the atmospheric CO₂e at 450 PPM by 2050. This concept is reinforced in this quote:

Quote 2:

To have a good chance (not a guarantee) of avoiding temperatures above those levels, studies focused on a goal of stabilizing the concentration of heat-trapping gases in the atmosphere at or below the 450 parts per million (ppm) CO₂-equivalent (CO₂e, a metric that combines the climate impact of all well-mixed GHGs, such as methane and nitrous oxide, in terms of CO₂).

However, Reference 1 also contains these rather alarming words (emphasis added):

Quote 3:

AG-12

AG-13

Response to Comment AG-13

This comment does not address the adequacy of the Draft EIR. Comment noted. Please also see Response to Comment AG-8.

Comment Letter AG

The CO₂e target is a somewhat approximate threshold, and the exact level of CO₂e is not precisely known because the sensitivity of the climate system to GHGs has uncertainty. Different models show slightly different outcomes within this range. An example of a pre-IPCC assessment study (Meinshausen et al. 2009) which has synthesized many studies on climate sensitivities, concluded that we would need to stabilize at about 400 ppm CO₂e in order to likely avoid exceeding the 2°C threshold (even at that stabilization target, there is still about a 20 percent chance of exceeding the temperature target).

The problem with stabilizing at 400 PPM CO₂e is that, as shown in Figures 2 and 3, the earth's current value is already above that level and the world has no plan to achieve the emission rate of 80% below the 1990 level anytime soon (if at all), which would give us a chance to cap the value.

Given all this, the following quote shows the desperate nature of our current predicament and the urgent need to do all measures that are technologically feasible and cost effective, as soon as possible:

Quote4:

Further, a recent paper by an international team of scientists (Hansen et al. 2013)¹⁶ asserts that the widely accepted target of limiting human-made global climate warming to 2°C above preindustrial levels is likely too high and may subject future generations and nature to irreparable harm. Recognizing this fact, the international community agreed in meetings in Cancun in 2012 to review, by 2015, progress to the 2°C target and consider whether it should be strengthened to a 1.5°C threshold.

Conclusion

The conclusion is that we have nothing under control and there is no valid scientific basis for such things as a "screening criteria" a "significance threshold", or a "threshold of significance", when it comes to GHG emissions. We are left with a fundamental principle of CEQA: for all projects (plans and developments), all feasible mitigation measures must be adopted.

THE STRATEGY-3, DRIVING-RELATED DESCRIPTIONS; OF HOW IT IS ASSUMED (OR DETERMINED); THAT SOME PERCENT WILL USE TRANSIT, WALK, OR BIKE AND THE DISTANCES THAT APPLY; FALL SHORT OF WHAT IS NEEDED TO ALLOW A READER TO JUDGE THE VALIDITY OF THE CLAIMED REDUCTIONS OR TO UNDERSTAND WHAT ENFORCEABLE MEASURES AND/OR FUNDING MIGHT IMPLEMENT THEM

Although Page 2-4 of the Draft PEIR says that the CAP's Appendix C.1 contains the methods for estimating GHG reductions, in fact they are in the CAP's Appendix B. We appreciate Appendix B for its explanation of its calculation-related assumptions and its methods. We checked the key work using the parameters and methodology given in Appendix B by putting them into an EXCEL spreadsheet we constructed, as shown in Table 3.

However, the justification and background information used to obtain the distances involved and the percentages of commuters who will use transit, walk, or bike are often too vague or without any detail or rationale given.

Response to Comment AG-14

This comment does not address the adequacy of the Draft EIR. Comment noted. Please also see Response to Comment AG-8.

Response to Comment AG-15

This comment does not address the adequacy of the Draft EIR. Comment noted. Please also see Response to Comment AG-8. Regarding the CAP Consistency Checklist and greenhouse gas emissions significance threshold, please see Response to Comment N-3.

Response to Comment AG-16

The reference to the correct Appendix in the CAP is included in the Final EIR. Regarding the reductions for CAP Actions under Strategy 3, please see Response to Comment AF-8. Please see also Responses to Comments AG-17 through AG-21 below.

AG-14

AG-15

AG-16

Comment Letter AG

Action 3-1. Transit

For example, near the top of Page B-30 it is written that SANDAG expects certain transit ridership by "providing incentives". However, there is no example given of what an incentive might be. Generally speaking, driving and parking are heavily subsidized and the parking subsidy results in reduced wages, increased rent, and increased costs. Policies to improve the way we pay for roads and parking might make more sense than "providing incentives", whatever that might mean. The City has a responsibility to convey this information, about how driving and parking are subsidized, to SANDAG.

The other explanation is that some information in the City of San Diego Planning Department's *Pedestrian Mobility Plan* somehow supports some "City planners and transportation engineers" to "anticipate" that by "prioritizing these areas for transit improvements", it would be possible to achieve a 12% commuter transit (peak period) mode share in 2020 and a 25% value for 2035. However, it is not stated what these transit improvements would be, that would be beyond what SANDAG is already funding as they assume that the 2020 value is 7.8% and the 2035 value is only 10.1%. It may be that the difference is that the SANDAG values are for the region and the Transit Priority Areas (TPAs) are going to be higher, for that reason. But that is not what is stated. Since the 12% and the 25% values are the key values driving the result, there should be more said about why they might be correct.

AG-17

Table 3 Results of an EXCEL Worksheet Check of the Methods And Parameters Given in Appendix B of the CAP

Transit		Transit Mode	TPA	Commute	VTM/Year	Grams		GHG
Year	Labor Force in TPA's	Share in TPAs	Commuters Using Transit	Distance (Miles)	255 Work Days per Year	Per Mile	Grams	Reduction MT
2020	433,128	12%	51,975	25	331,342,920	360	119,283,451,200	119,283
2035	482,540	25%	120,635	25	769,048,125	275	211,488,234,375	211,488
Walk		Walk Mode	TPA	Commute	VTM/Year	Grams		GHG
Year	Labor Force in TPA's	Share in TPAs	Commuters Using Walk	Distance (Miles)	255 Work Days per Year	Per Mile	Grams	Reduction MT
2020	433,128	4.1%	17,758	0.67	3,033,997	360	1,092,238,801	1,092
2035	482,540	6.5%	31,365	0.67	5,358,727	275	1,473,650,017	1,474
Bike		Walk Mode	TPA	Commute	VTM/Year	Grams		GHG
Year	Labor Force in TPA's	Share in TPAs	Commuters Using Bike	Distance (Miles)	255 Work Days per Year	Per Mile	Grams	Reduction MT
2020	433,128	6.0%	25,988	8	53,014,867	360	19,085,352,192	19,085
2035	482,540	18.5%	89,270	8	182,110,596	275	50,080,413,900	50,080

Response to Comment AG-17

Please see Response to Comment AG-8. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

Comment Letter AG

Action 3-2, Commuter Walking

For walking it is stated at the top of Page B-32 that SD *Pedestrian Master Plan of 2006* provides estimates for walking in the various Community Planning Areas of the City. It is then stated that it is assumed that the mode will increase from 3.46% to 4.1% in 2020 and 6.5% in 2035 in TPAs. However, there is no reason given to expect these increases. The important assumption of the average walk distance of 0.67 miles is made based on an email from someone who works at SANDAG, named Mike Calandra. The email was sent on January 9th, 2015. We don't know what was written in the email.

AG-18

Action 3-3, Commuter Bicycling

For biking, it says that the SD Bike Master Plan predicts, for no stated reason, that biking will increase by 279% (increase by a factor of 3.79) by 2022, with no reference year given. Therefore, it is stated that it is assumed that biking will increase from 2% to 6% (a 200% increase or an increase by a factor of 3) by 2020 and then do this again in the next 15 years. There is nothing written about the all-important assumption of an 8 mile round-trip.

AG-19

Action 3-6, Reduction in Commute Miles

On page B-36 the assumption is used that the average round-trip commute distance would drop from 25 mile to 23 miles. This is based on some unspecified "planning efforts" to densify the urban environment. We support this idea but we would like to see some plan to ensure that this will happen. Zoning changes are subject to political will.

AG-20

Overview of "Actions 3-n"

One thing that should be shown is the information in Table 4. This gives the reader an idea of how strict the criteria are for what constitutes a Transit Priority Area (TPA). We suspect that most San Diego workers drive to work to find a free surface parking lot and poor transit service. The percentage of this across the County would be worse. San Diego needs to adopt policies that will help other municipalities that have less clustering, less density, and worse transit to also reduce driving. The CAP draft needs to be rewritten with this feature. More specifically, it needs policies to reduce driving in both the TPAs and the developments that are not in TPAs. It needs to include commitments to lobby SANDAG and the state of California to adopt policies that will address driving in the urban sprawl which includes most of San Diego and certainly most of San Diego County. This must include improvements to how we pay for driving and parking. What are the values that are not shown in Table 4? More specifically what number of employees in San Diego suffer a reduced paycheck so that their company can offer what many think is "free" parking?

AG-21

Table 4
Percent of San Diego Workers in
PDAs and with "Free" Parking

Year	Workers	In TPA's		Abused by Bundled-Cost ("Free") Parking	
		Number	Percent	Number	Percent
2020	504,178	433,128	85.9%	?	?
2035	569,416	482,540	84.7%	?	?

Response to Comment AG-18

Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting. The referenced email referred to by the commenter is on file with the City's Planning Department.

Response to Comment AG-19

Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting. The commenter references an assumption of an 8-mile roundtrip walking commute distance. The CAP did not make such an assumption. See CAP Appendix page A-33 which shows an assumed round-trip commute distance of 0.67 miles.

Response to Comment AG-20

Comment noted. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

Response to Comment AG-21

Comment noted. The TPA is shown in CAP Appendix B.

Comment Letter AG

Strategy 3 Overview

We find it unacceptable and in violation of CEQA law that there are not better explanations and plans shown to achieve these assumptions about the number of people that will use transit, walking, and biking.

One important source of GHG reduction strategies that was overlooked is shown in Reference 6. It contains a number of strategies with associated GHG reduction estimates.

For example, in the *Transportation Section* of its Chapter 7, it says (Section 3.3.2):

3.3.2 Unbundle Parking Costs from Property Cost

Range of Effectiveness: 2.6 – 13% vehicles miles traveled (VMT) reduction and therefore 2.6 – 13% reduction in GHG emissions.

Measure Description:

This project will unbundle parking costs from property costs. Unbundling separates parking from property costs, requiring those who wish to purchase parking spaces to do so at an additional cost from the property cost. This removes the burden from those who do not wish to utilize a parking space. Parking will be priced separately from home rents/purchase prices or office leases. An assumption is made that the parking costs are passed through to the vehicle owners/drivers utilizing the parking spaces.

However, forcing someone who owns an office with associated parking to operate the parking as a separate business may not be the best way to solve this problem because the landowner may not reduce the rent on the building enough and furthermore, the tenant company leasing the building may not pass along enough of the rent savings to the workers. The scheme therefore lacks transparency for the workers and for the general public. We need a simple, transparent system that mitigates the full damage done by bundled-cost parking. It needs to put workers economic rights first. It needs to show the workers exactly what is going on. It needs to protect low income workers that must keep driving. It must deliver significant reductions in driving. All of this can be done, as shown in the next section. Under CEQA it is illegal to ignore feasible mitigation.

In our court case against the County's deficient Climate Action Plan, an Appellate Court Justice, after asking for an example of a feasible mitigation measure that was ignored and after then being informed of this program, stated, "that sounds like feasible mitigation to me."

OVERLOOKING THE HIGH-POTENTIAL MEASURE OF IMPROVING THE WAY WE PAY FOR PARKING, ESPECIALLY AT WORK LOCATIONS

Our Previous Attempts to Inform the City About Parking

In numerous communications, over the years, we have tried to interest the City in getting serious about a car-parking policy that would improve the way we pay for parking.

We received the following response after writing a rather detailed email about a better way for workers to be treated, regarding their employee parking, whereby their parking is operated as a business, with all the earnings going to the workers.

AG-22

AG-23

Response to Comment AG-22

Comment noted. Implementation of the CAP would result in less than significant greenhouse gas emissions impacts as analyzed in Draft EIR Section 3.D.

Response to Comment AG-23

This comment does not address the adequacy of the Draft EIR. Comment noted. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

LETTER

RESPONSE

Comment Letter AG

From: Pratt, Linda Giannelli [mailto:LPratt@sanidiego.gov]
Sent: Monday, December 19, 2011 9:08 AM
To: Mike
Subject: RE: Regarding SD's C-MAP's Approach to Parking Policy

Great comments, Mike, and I can see how your proposal may be a better approach. I will check with our team and see how this works with the Development Services Dept.

Thanks again very much!

Linda
 Linda Giannelli Pratt
 Chief Program Manager
 City of San Diego Environmental Services Department
 office 858-492-5088 cell 858-518-7834
LPratt@SanDiego.gov
 9601 Ridgehaven Court, suite 310
 San Diego, CA 92123-1636

We also sent Reference 7 and then Reference 8, which both contained information about car parking. As near as we can tell, we were ignored both times.

Subject Documents' (Draft CAP, Draft PEIR, Screening Criteria, including all Appendices of all three documents) Statements about Car Parking Policy Improvements and Why These Statements Are Insufficient, Under CEQA

The CAP, on Page 25 (emphasis added):

Land Use

Transportation strategies cover a broad range of activities that aim to reduce vehicle miles travelled (VMTs), improve mobility, and enhance vehicle fuel efficiency. Specific implementation measures involve changing land uses, adopting a new perspective on community design, promoting alternative modes of travel, **revising parking standards, and managing parking.**

This level of detail is unacceptable.

The CAP, on Page 39 (emphasis added and note that these measures, while being, for the most part, only vague promises. and thus far from having the *enforceable* characteristic required, do have the potential to reduce driving if they were properly developed, and so we would love to help to develop them into enforceable measures.):

SUPPORTING MEASURES FOR BICYCLING, WALKING, TRANSIT & LAND USE:

- Implement bicycle improvements concurrent with street re-surfacing projects, including lane diets, green bike lanes, sharrows, and buffered bike lanes.

AG-23

AG-24

Response to Comment AG-24

This comment does not address the adequacy of the Draft EIR. Comment noted. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

Comment Letter AG

- Implement a bicycle sharing program with DecoBikes. Reduce the “1 mile” barrier gap by ensuring that further expansion of the bike share program is designed and implemented to reduce the distance needed to travel between transit stops and destinations.
- Identify and address gaps in the City’s pedestrian network and opportunities for improved pedestrian crossings, using the City’s Pedestrian Master Plan and the City’s sidewalk assessment.
- Adopt City portions of SANDAG’s forthcoming first mile/last mile initiative and incorporate Safe Routes to Transit strategies in Transit Priority Areas.
- Coordinate pedestrian counting programs with SANDAG and SDSU Active Transportation Research Programs.
- ***Develop a Parking Plan to include measures such as “unbundled parking” for nonresidential and residential sectors in urban areas.***

AG-24

We notice that this wording makes no specific commitment. Also, we actually don’t know what “unbundled parking” is. We do know what *unbundling the cost of parking* means. What is the City’s understanding of what it means to unbundle the cost of parking? How would you describe a system that mitigates the harm of bundled-cost parking?

The draft PEIR on Page 2012 (emphasis added and removing Actions 3.1 through 3.5, since they have no mention of parking):

Strategy 3: Bicycling, Walking, Transit & Land Use

As stated in the CAP, the goals for Strategy 3, Bicycling, Walking, Transit and Land Use, are to increase the use of mass transit, increase commuter walking and bicycling opportunities, and promote the effective land use to reduce vehicle miles traveled. Proposed actions to implement this strategy include the following:

Action 3.6: Implement transit-oriented development within TPAs. The target for Action 3.6 is to reduce average vehicle commute distance by two miles through implementation of the General Plan’s City of Villages Strategy by 2035. Similar to Action 3.1, this action would facilitate the implementation of the City of Villages Strategy, which would result in the concentration of new development in TPAs. The CAP includes several supporting measures for Strategy 3, Bicycling, Walking, Transit and Land Use:

AG-25

- Implement bicycle improvements concurrent with street re-surfacing projects, including lane diets, green bike lanes, sharrows, and buffered bike lanes.
- Implement a bicycle sharing program with DecoBikes. Reduce the “1 mile” barrier gap by ensuring that further expansion of the bike share program is designed and implemented to reduce the distance needed to travel between transit stops and destinations.
- Identify and address gaps in the City’s pedestrian network and opportunities for improved pedestrian crossings, using the City’s Pedestrian Master Plan and the City’s sidewalk assessment.
- Adopt City portions of SANDAG’s forthcoming first mile/last mile initiative and incorporate Safe Routes to Transit strategies in TPAs.
- Coordinate pedestrian counting programs with SANDAG and SDSU Active Transportation Research Programs.

Response to Comment AG-25

This comment does not address the adequacy of the Draft EIR. Comment noted. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

Comment Letter AG

- **Develop a Parking Plan to include measures such as “unbundled parking” for nonresidential and residential sectors in urban areas.**

Again, there is no commitment here, since the words “such as” could allow just about anything. This is certainly lacking any detail. It does not even let the reader know what “unbundled parking” is and it does not give an informed reader any confidence that the City knows what “unbundled parking” is or, more to the point here, what it means to bundle the cost of parking or how to implement a policy that would mitigate the harm caused by the baseline policy of

- Bundling the cost of parking and then
- Letting everyone think that the parking is “free”.

What is needed is a parking-policy improvement that is meaningful and enforceable, as was established in the court case against the County's Climate Action Plan.

The High Frequency of Bundled-Cost (“Free”) Parking

UCLA Professor Donald Shoup (now retired), a well-known economist and author (*The High Cost of Free Parking*) has written that 99% of car trips in the United State end in what is known as “free” parking. Generally speaking, parking is expensive to provide and so of course someone is paying for all of the so-called “free” parking. Professor Shoup has written that the yearly subsidy made to car parking is about equal to our nation's defense budget.

We need to know the frequency of bundled-cost (“free”) parking in both the City of San Diego (the City's primary responsibility) and in San Diego County (San Diego's secondary responsibility, since the City has 40 of the 100 weighted SANDAG votes.) This is why the Table 4 values need to be filled in, with more columns added to cover the employees both in and out of TPAs and the number of employees in San Diego County that suffer the abuse of bundled-cost parking. We suspect that a very high percentage of the car-parking facilities in San Diego are operated as bundled-cost parking and that this is especially true in the suburban areas of San Diego, where the per-capita vehicle-miles travelled (VMT) is higher than the city average.

A Car-Parking System that Will Mitigate the Harm Caused by Bundled-Cost Parking

This report, <http://www.sandiego.gov/environmental-services/pdf/sustainable/parkingcosts.pdf>, which was peer-reviewed by the Air and Waste Management Association (AWMA), describes a system that is applicable to nearly all types of parking. It is included here as Reference 9. The City needs to fully understand Reference 9 and decide if it describes a system that should be widely implemented throughout San Diego. It could be argued that wherever a parking operation is its own, for-profit business, there is no need for change. However, there are advantages to the Reference 9 system that go beyond just fair pricing, economic justice for those that might like to drive less than average, and reducing the choice of driving. One thing the CAP does not talk about is the VMT resulting from drivers that are driving around looking for parking. This significant problem is addressed in Reference 9 and, in fact, it is solved, or eliminated, for any driver with a GPS. This is because the private sector will create software that will utilize the system-generated data to guide a driver to the best available parking spot that meets the driver's cost and location requests.

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AG-26

Response to Comment AG-26

This comment does not address the adequacy of the Draft EIR. Comment noted.

Comment Letter AG

Although the Reference system is an optimum, overall system, it cannot be implemented until demonstration projects show that a simplified version can be implemented and will please all of the stakeholders. Reference 10 describes a system that could be installed at a worksite; Reference 11, at a school site.

For convenience and to provide the gist of the operation of the worksite demonstration, the following words, from the Introduction of Reference 10, are brought into this letter as follows:

This paper describes a parking policy that distributes the benefit of parking to all employees, regardless of how often they choose to drive. It does this by

- Charging a fair price for the parking, per unit of time parked, and by
- Giving the total earnings (*total parking-lot earnings*) to the employees, such that each employee's share of the *total parking-lot earnings* is proportion to the time they spend at the work site served by the parking.

The following, additional, optional action would guarantee that no driver loses money under the policy:

- Adding a *must-drive bonus* to each driver's share of the *parking-lot earnings*, if it happened that their share of the *parking-lot earnings* is less than their parking-lot charge. This means that the employee's *must-drive bonus* would be equal to their *parking-lot charge* minus their share of the *parking-lot earnings*.

If an employer decided to pay a *must-drive bonus* to its employees, it would be possible to allow employees to effectively "opt out" of the program so they would not need to be mailed the car-parking statements. The system would feel like "free parking" to them.

The "must drive" bonus would protect the economic interests of drivers, including low-income drivers, who find that they must continue to drive. It also can answer an employer's concern that the program would put them at a disadvantage, with respect to companies that continue to have "free" parking. (We would argue just the opposite: employees will appreciate the company being more environmentally aware and more economically just, making competitors that stick with the old system look unaware and part of the climate-crisis problem.) It is anticipated that funding the "Must-Drive Bonus" would be a responsibility of the employer, although it is possible that if there is a grant involved, the money could come from the grant.

A Case for Suburban Implementations

Implementing parking systems that unbundle the cost of parking need to start with a reduced set of features, compared to a full-featured system. It is unwise to suggest that good systems should not be implemented in the suburbs. If a factory in section of San Diego that had no transit at all were to unbundle the cost of its parking, there would be very little hardship on drivers, because most of the workers would continue driving. For example, if there were 100 workers and the charge was \$5 per day and only 2 employees biked to work and everyone else drove alone, the money to be divided among the 100 employees would be \$490 dollars per day. Each worker (this simplified example assumes everyone works the same number of hours per day) would earn \$4.90 per day. The two bicycle riders would net a plus \$4.90 per day. The drivers would net a loss of ten cents per day. Note that if the two unused parking

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Response to Comment AG-27

This comment does not address the adequacy of the Draft EIR. Comment noted.

Comment Letter AG

spaces could be rented out to the general public, for \$5 per day, the drivers could break even. The authors of the Draft CAP perhaps do not want to take the time to consider this proposal because they think that unbundling in the suburbs would not work. This is false, as the simple example shows. Since the employees will feel like the bike riders are getting paid to not drive, they will all consider joining them. Therefore, it would not be surprising if the number of bike commuters were to increase to three or more.

Data Showing that the Driving-Reduction Mitigation Could Be Significant

Table 5 is taken from Reference 9.

Table 5 Eleven Cases of Pricing Impact on Parking Demand

Location	Number of Workers @ Number of Firms	1995 \$'s	Parking Use Decrease
Group A: Areas with poor public transportation			
West Los Angeles	3500 @ 100+	\$81	15%
Cornell University, Ithaca, NY	9000 Faculty & Staff	\$34	26%
San Fernando Valley, LA	850 @ 1	\$37	30%
Costa Mesa, CA	Not Shown	\$37	22%
Average for Group		\$47	23%
Group B: Areas with fair public transportation			
Los Angeles Civic Center	10,000+ @ "Several"	\$125	36%
Mid-Wilshire Blvd, Los Angeles	1 "Mid-Size" Firm	\$89	38%
Washington DC Suburbs	5,500 @ 3	\$68	26%
Downtown Los Angeles	5,000 @ 118	\$126	25%
Average for Group		\$102	31%
Group C: Areas with good public transportation			
U. of Washington, Seattle, WA	50,000 employees, students	\$18	24%
Downtown Ottawa, Canada	3,500 government staff	\$72	18%
Bellevue, WA	430 @ 1	\$54	39%*
Average for Group, except Bellevue, WA Case*		\$45	21%
Overall Average, Excluding Bellevue, WA Case*			25%

* Bellevue, WA case was not used in the averages because its walk/bike facilities also improved and those improvements could have caused part of the decrease in driving.

The top row of this letter's Table 3 indicates that if this result were to be applied to all of the workers in the TPAs, the overall average reduction to driving of 25% (just over twice the 12% shown in the top row of Table 3) would result in over 220,000 MT of CO₂e per year. Clearly this strategy is worth implementation, especially since it is both technologically feasible and cost effective. Since parking is expensive to provide and unused parking could be converted to better uses, this strategy will be cheaper than free, after the initial designs are implemented.

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AG-28

Response to Comment AG-28

This comment does not address the adequacy of the Draft EIR. Comment noted.

Comment Letter AG

Besides this, our climate crisis requires that we develop strategies that could be "dialed up" as needed. This is such a policy because the price could be adjusted upward, if needed. This will not be judged as "draconian" because the earnings are returned to the employees. (Allowing climate destabilization would be "draconian".)

Specific Policy Suggestion**Action 3-7:**

Develop a Parking Reform Implementation Plan by 2016, to include methods to unbundle the cost of parking, first at schools and places of employment, but to extend into all parking, in both suburban and urban areas, by 2025. The first reduced-feature, demonstration projects, which would include automated, monthly, pricing-and-payout statements, with net earnings or charge for each employee, should be implemented no later than 2017. By 2020, these reduced-feature systems should cover no less than 40% of all work-place parking that was previously bundled-cost parking. The system should eventually include instantaneous pricing to ensure availability; fully shared, anybody-can-park-anywhere parking availability with no or very-infrequent time limits; GPS-system directions to the best parking at the desired price; accurate price estimations; mailed statement features that will protect privacy; and the capability to reduce price as needed to protect low-income drivers and handicapped drivers. By 2025, 80% of all parking that would have been unbundled-cost parking in 2012, would be covered by these systems. Parking on the property of single-family homes, apartments up to 6 units, and all individually-owned parking behind garage doors are exempt. All on-street parking is covered by this system. More detail can be seen for one such system at <http://www.sandiego.gov/environmental-services/pdf/sustainable/parkingcosts.pdf>.

FAILURE TO INCLUDE AN EDUCATION PROGRAM AND INFRASTRUCTURE ACCESS PROJECTS TO INCREASE THE USE OF BICYCLE TRANSPORTATION, TO REDUCE DRIVING

The criterion for spending money for bicycle transportation should be to maximize the resulting estimated reductions in driving. This criterion is not being used at SANDAG and it may not be getting used at San Diego. There were no statements in the subject documents on using any particular criterion for the ranking of bicycle projects. The subject documentation should be amended to require that the City adopt this criterion and that the City representatives to SANDAG urge SANDAG to adopt this criterion, for its bicycle expenditures.

Projects

Each TPA, each of SANDAG's well-documented Smart-Growth Concept Map Smart-Growth areas, and each high-trip-generation locations (such as the airport) should be checked to see if bicycle access could be substantially improved with either a traffic-calming project, a "complete streets" project, more shoulder width, or a project to overcome some natural or made-made obstacle. These projects should be prioritized using a cost/benefit ratio metric. These projects should be allowed to compete with the current bicycle projects planned.

Then, projects should be selected for implementation, from the top of the list (lowest cost-to-benefit ratio) down, until the money is used up.

Building recreational bike paths may also be a cost-effective expenditure. However they do send a message that bikes do not belong on the road. Only data can resolve this debate.

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AG-30

Response to Comment AG-29

This comment does not address the adequacy of the Draft EIR. Comment noted.

Response to Comment AG-30

This comment does not address the adequacy of the Draft EIR. Comment noted.

Comment Letter AG

Education

Also competing for the money should be the "project" of bicycle education, using the League of American Bicyclist's "Traffic Skills 101" class, taught by League (this stands for the League of American Bicyclists) Certified Instructors ("LCI" Classes). To scale this program up to meaningful levels, subsidy of both the instructors and student should be considered.

1.) Teach students about bicycle accident statistics (most serious injuries occur to cyclists in accidents not involving a motor vehicle), car-bike accident statistics (most are caused by wrong-way riding and errors in intersections), and how to ride in all conditions, to minimize problems.

2.) Teach students riding-in-traffic skills and how to ride in other challenging conditions, by having the class members and instructor go out and ride in real conditions, until proficiency is achieved and demonstrated.

Students that pass a rigorous written test and demonstrate proficiency in traffic and other challenging conditions are paid for their time and effort, to ensure that the number of students can be large enough to make a significant difference. Methods to recruit low-income adults and students should be employed but all applicants, from all ages and all walks of life, should be accepted.

To be clear, these classes should be based on the curriculum developed by the League of American Bicyclists and taught by instructors certified by the League.

Here is an example of how to scale up the size of the program and reach into communities that might not be able to rationalize the time and expense of taking a class. Assuming a class size of 4 riders per instructor and that each rider passes both tests and earns \$100 and that the instructor, with overhead, costs \$400 dollars, for a total of \$800 for each 4 students, means that \$10M could educate $\$10M/\$800 = 12,500$ classes of 4 students, for a total of 50,000 students, out to year 2050. For \$20M, 100,000 students could graduate. Data should be collected to verify that this is a cost effective method of reducing VMT.

FAILURE TO HELP THE READER UNDERSTAND WHAT IT WILL TAKE TO GET CALIFORNIA CAR AND LIGHT-DUTY TRUCKS (LDVS) TO SUPPORT CLIMATE STABILIZATION

Reference 12 is an example of a document that develops a set of requirements to ensure that California cars and light-duty trucks (the LDV sector) will support climate stabilization. It makes use of a key, unambiguous statement in Reference 13. It has been peer reviewed by the Air and Waste Management Association (AWMA).

FAILURE OF THE SCREENING CRITERIA TO RECOGNIZE THAT WE HAVE A CLIMATE CRISIS AND THAT KEEPING EMISSIONS BELOW THE STATE'S CURRENT CLIMATE MANDATES IS NO ASSURANCE OF SUPPORTING CLIMATE STABILITY, IN THE CUMULATIVE SENSE, AND CERTAINLY NO ASSURANCE THAT A PROJECT WILL NOT BE SIGNIFICANT, IN TERMS OF GHG EMISSIONS

Section 1 says that if a project meets AB 32, it is not significant. The facts are that if a project fails to support AB 32, it is known to be contributing to destabilization, which equates to a devastating collapse of the human population, as shown in this letter. If a project is not doing this, then it does not follow that it is therefore insignificant. AB 32 is in fact a threshold of catastrophe, not a threshold of significance. Given the severity of our climate crisis, any

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AG-33

Response to Comment AG-31

This comment does not address the adequacy of the Draft EIR. Comment noted.

Response to Comment AG-32

This comment does not address the adequacy of the Draft EIR. Comment noted.

Response to Comment AG-33

Please see Responses to Comments N-3 and AG-8.

LETTER

RESPONSE

Comment Letter AG

project should be reviewed and all feasible mitigations that are cost effective should be applied.

Section 2.1 misleads the reader into thinking that if atmospheric CO₂e does not exceed 450 parts per million, we know that the temperature change will stay below 2 degree Celsius. See the section of this letter titled *The Definition of Climate Destabilization, the Omission of This Definition in the Subject Documents, and Why this Omission Violates CEQA Law* to see that this is not true at all. Section 2.1 is an unacceptably poor "Climate Science Overview". It should be replaced with the contents of this letter's *The Definition of Climate Destabilization, the Omission of This Definition in the Subject Documents, and Why this Omission Violates CEQA*.

Section 3.1 contains many misleading and unacceptable statements. The updated scoping plan, Reference 1 of this document, is a state plan and it certainly extends past the year 2020. For this reason, it is not reasonable to not consider the 2030 target of B-30-15.

Section 3.2 admits that substantial evidence is needed. There is no credible, substantial evidence that justifies ignoring emissions after 2020.

The very sad fact that other municipalities have skirted the law and only looked to 2020 is no justification for doing that here. In Section 3.2, all discussion should end with this statement (emphasis added):

The overall framework of GHG significance determination is based on the following questions in the checklist contained in Appendix G of the CEQA Guidelines:

A project would have a significant effect on GHG emissions if it would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment

Section 3.2 then twists this in a way which violates the "may have" criteria. Given the precarious nature of our climate crisis as shown by the information on climate stabilization presented in this letter from Reference 1, an official document of California, it well may be too late to prevent human extinction. This is shown to be true by the following facts, from Reference 1:

- It was thought that capping the atmospheric level of CO₂e at 450 PPM by 2050 would ensure a temperature rise of less than 2 degrees Celsius and that staying below 2 degrees would achieve stability
- Capping the atmospheric level of CO₂e at 450 PPM by 2050 may not happen
- We may actually need to cap at 400 PPM to ensure a temperature rise of 2 degrees Celsius, which is impossible because the value is already above 400 ppm
- We may be aiming for a temperature change (2 Degrees Celcius) that would not stabilize the climate at a livable level after all and in any case
- We should have been aiming at 1.5 degree Celsius

These facts invalidate most of the Screening Criteria assertions and all of its significant conclusions.

The "too small to matter" approaches, taken, for example, at the start of section 3.3, where the text calls out a limit of 1,350 MT per year, are faulty because what matters is that the

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Response to Comment AG-34

Please see Responses to Comments N-3 and AG-8.

Response to Comment AG-35

Please see Responses to Comments N-3 and AG-8.

Response to Comment AG-36

Please see Responses to Comments N-3.

Response to Comment AG-37

Please see Responses to Comments N-3.

Response to Comment AG-38

Please see Responses to Comments N-3 and AG-8.

Response to Comment AG-39

Please see Responses to Comments N-3 and AG-8.

Comment Letter AG

product of the per-capita emissions, multiplied by the population; because that product gives net emission and net emission is what drives climate change. A small project may not emit much GHG but if it also serves a small population, the fact that it's emission total is small does not matter. The whole "too small to matter" criterion fails because of this.

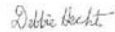
FINAL COMMENTS

Other mitigations, which are described in References 14 should also be considered for implementation. This letter has shown many reasons why the subject documents need to be revised.

Respectfully submitted,



Mike Bullock mike_bullock@earthlink.net
Chair, Transportation Subcommittee
Sierra Club San Diego



Debbie Hecht
Chair, Steering Committee
Sierra Club San Diego

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AG-41

References

Note: References 7, 8, 10, 11, 12, and 14 were attached in the email sent to the City that contained this letter. Many of the other references can be viewed at the links shown.

- 1.) *First Update to the Climate Change Scoping Plan*, pursuant to AB 32;
http://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_s_coping_plan.pdf
- 2.) Tarbuck, E.; Lutgens, F.; *Earth Science*; Tenth Edition, published by Prentice Hall, 2003, page 539
- 3.) Vespa, M.; *Comments on Survey of CEQA Documents on Greenhouse Gas Emissions Draft Work Plan and Development of GHG Threshold of Significance for Residential and Commercial Projects*, Letter from Center for Biological Diversity to Elaine Chang, Deputy Executive Officer of Planning, Rule Development, and Area Sources of the South Coast Air Quality Management District; dated April 15, 2009. [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-10/ghg-meeting-10-cbd-comment-letter.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-10/ghg-meeting-10-cbd-comment-letter.pdf?sfvrsn=2)
- 4.) Hertsgaard, M; *Latino Climate Solution*, *the Nation*, Dec. 24/31, 2012
- 5.) Whitney E.; *How to Meet the Climate Crisis*, *UU World*, Volume XXVI No. 4, Winter 2012
- 6.) *Quantifying Greenhouse Gas Mitigation Measures, A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures*; August, 2010; California Air Pollution Control Officers Association

Response to Comment AG-40

Please see Response to Comment AG-39.

Response to Comment AG-41

This comment does not address the adequacy of the Draft EIR. Comment noted.

Comment Letter AG

- 7.) Letter from San Diego Sierra Club Transportation Chair to Linda Giannelli Pratt and Anna McPherson, regarding San Diego's C-MAP and Negative Declaration document for the C-Map, September 28, 2012
- 8.) Letter from San Diego Sierra Club Transportation Chair to Brian Schoenfisch, Senior Planner of the Planning, Neighborhoods & Economic Development Department, City of San Diego, regarding San Diego's Draft Climate Action, December 13, 2013
- 9.) M. Bullock & J. Stewart, *A Plan to Efficiently and Conveniently Unbundle Car Parking Costs*; Paper 2010-A-554-AWMA, from the Air and Waste Management Association's 103rd Annual Conference and Exhibition; Calgary, Canada, June 21-24, 2010; <http://www.sandiego.gov/environmental-services/pdf/sustainable/parkingcosts.pdf>
- 10.) Bullock, Mike; *Equitable and Environmentally-Sound Car Parking Policy at a Work Site*; Aug. 30, 2015; unpublished report; attached with submission of comment letter and available on request from mike_bullock@earthlink.net
- 11.) Bullock, Mike; *Equitable and Environmentally-Sound Car Parking Policy at Schools*; July 20, 2011; unpublished report; attached with submission of comment letter and available on request from mike_bullock@earthlink.net
- 12.) Bullock, Mike R; *The Development of California Light-Duty Vehicle (LDV) Requirements to Support Climate Stabilization: Fleet-Emission Rates & Per-Capita Driving*, Paper 30973-AWMA, from the Air and Waste Management Association's 107th Annual Conference and Exhibition; Long Beach, CA, June 24-27, 2014; Attached with submission of comment letter and available on request from mike_bullock@earthlink.net
- 13.) Hansen, James, *Brief of Amicus Curiae, Exhibit A*; United States District Court for the Northern District of California San Francisco Division, Case4:11-cv-02203-EMC Document108 Filed 11/14/11 <http://ourchildrenstrust.org/sites/default/files/Hansen%20Amicus%20.pdf>
- 14.) *Ideas and Proposals for San Diego CAP Improvements*, December 12, 2013, based on a boiler-plate document, written by a group of San Diego Sierra Club activists who were working on multiple climate action plans. (Attached in the email containing this letter)

The San Diego Chapter of the Sierra Club is San Diego's oldest and largest grassroots environmental organization, founded in 1948. Encompassing San Diego and Imperial Counties, the San Diego Chapter seeks to preserve the special nature of the San Diego and Imperial Valley area through education, activism, and advocacy. The Chapter has over 11,000 members. The National Sierra Club has over 700,000 members in 65 Chapters in all 50 states, and Puerto Rico.



Comment Letter AH

**COMMUNITY FOREST ADVISORY BOARD
CITY OF SAN DIEGO**


September 29, 2015

Ms. Rebecca Malone, Associate Planner
City of San Diego Planning Department
1222 First Avenue, MS 501
San Diego, CA 92101
DSDEAS@saniego.gov

Re: Comments on Draft Program Environmental Impact Report (PEIR) for San Diego Climate Action Plan (CAP)

Dear Ms. Malone:

Thank you for the opportunity to comment on the PEIR for the City's Climate Action Plan (CAP). These comments follow from the Community Forest Advisory Board's (Board) responsibilities to provide recommendations on urban forestry-related policies and programs; reviewing the implementation and compliance with urban forestry policies and programs; and advocating for funding for the establishment and maintenance of an urban forestry program.¹ The Board passed a resolution on September 9, 2015 for the submission of this letter as official comment on the PEIR.

The City's draft CAP includes Strategy 5 (Climate Resiliency), with targets for an Urban Tree Planting Program to achieve 15% urban tree cover by 2020 and 25% by 2035. This letter outlines considerations for the Environmental Setting, Project Description, and Impacts for these targets.

AH-1

PEIR Chapter 2. Project Description
F. Greenhouse Gas Strategies and Reductions
Strategy 1: Water and Energy Efficient Buildings

This strategy identifies improving water rate structures by such strategies as installing landscaping that uses less water. It also notes that, "an Outdoor Landscaping Ordinance would result in more efficient landscape irrigation systems and could encourage the installation of landscaping that uses less water."

The dominance of water use reduction through vegetation removal and very reduced irrigation schedules is slowly resulting in greater (although unmonitored) tree mortality in the City. This CAP strategy needs to recognize the benefits of trees and explicitly state that tree irrigation is a legitimate component of climate mitigation and adaptation.

AH-2

Response to Comment AH-1

Comment noted.

Response to Comment AH-2

Comment noted. The CAP also includes CAP Action 5.1, Urban Tree Planting Program. For additional information related to GHG reductions from Action 5.1, please see CAP Appendix page A-43. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting.

Comment Letter AH

Letter from CFAB about PEIR for Climate Action Plan (CAP), September 29, 2015, page 2

While it is imperative that the City reduce and then provide for future water needs, the trees are actually part of the “built environment” that accompanies residential, commercial, and industrial land use. No one expects to live in houses without appliances or neighborhoods without schools, yet it is inconceivable to live on a street without trees and shade—and there are actually many in the City.

The PEIR needs to incorporate trees to increase energy efficiency of buildings. Trees can be planted to reduce building energy use, as they shade buildings and lower the temperature of the ambient air around buildings.

Strategy 3: Bicycling, Walking, Transit, and Land Use

The high goals for active transportation are some of the most critical goals in the Climate Action Plan. As walking increases as a way to get to work, shopping and leisure activities, the “walkability” of streets will be increasingly important. Trees are important components in the “livability” of creating conditions to attract residents to the City of Villages.

Strategy 5: Climate Resiliency

CFAB has advocated for and supports a city-wide urban tree planting program. The trees along streets, in parks and open space areas, and on residential and commercial properties provide many benefits to the City, its residents and visitors. The additional trees will provide shade, save energy, improve air quality and public health, sequester carbon, reduce stormwater runoff, increase property values, create wildlife habitat, and enhance quality of life.ⁱⁱ

In Table 2-3, the percent contribution of urban tree cover (tree planting) is 2 to 4% of the total projected GHG reduction. Such a low percent is a reminder that the quantities of GHG produced by buildings, transportation, and landfill waste are very large. The primary benefit of urban tree canopy will be the “liveability” for the City’s residents as the average temperature rises.

The “urban heat island reduction” effect is only mentioned on page 3.A-21 as policy CE-A.2 of the General Plan. Yet it is the predominant benefit of trees and should be further developed for this strategy. Broad canopy trees lower temperatures by shading buildings, asphalt, and concrete. They deflect radiation from the sun and release moisture into the air. The “urban heat island effect” is the resulting higher temperature of areas dominated by buildings, roads, and sidewalks.

Cities are often 5 to 10°F hotter than undeveloped areas, because hot pavement and buildings have replaced cool vegetated land. In addition, high temperatures increase the volatility of automobile oil and oil within the asphalt itself, releasing the fumes into the atmosphere. Shade trees can reduce asphalt temperatures by as much as 36°F, which diminishes the fumes and improves air quality.ⁱⁱⁱ

Tree planting will require funding, education, incentives, compliance with regulations and permits, and other approaches, few of which are outlined in the CAP. As the City has been planting only a few hundred trees annually in the past decade, the tree planting and care program needs to be greatly accelerated. A Chinese proverb says, “The best time to plant a tree is 20 years ago. The next best time is now.”

AH-2

Comment Letter AH

Letter from CFAB about PEIR for Climate Action Plan (CAP), September 29, 2015, page 3

Larger trees need to be favored, as they provide larger canopies and sequester more carbon. Trees need to be watered, pruned, and protected in order to maximize their health and life span. They are one of the few municipal assets that appreciate with age.

Trees need to be planted in all neighborhoods to achieve the increased tree canopy, but priority needs to be given to areas that have few parks and street trees. The CAP should clearly identify urban tree canopy priorities for tree-deficient communities, underserved communities, and potential connectivity to open space and natural areas.

One proposed action, to implement Strategy 5 for increasing the urban tree canopy coverage, has been completed:

Mr. Jeremy Barrick began working as the City's Urban Forestry Program Manager on August 17.

Two of the proposed actions are underway:

The Urban Tree Canopy Assessment (UTCA) will be undertaken in early 2016 with funds from the California Department of Forestry and Fire Protection (CalFire). This will accurately describe both the Environmental Setting and identify the areas that trees can be planted and managed. The UTCA will use high-resolution remotely-sensed Light Detection and Ranging (LiDAR) data recently obtained by the City (to a 4-inch resolution). The methods for converting the billions of LiDAR data bits into geospatial data were established with a team led by the USDA FS and have been applied to more than 70 communities to confirm current urban forestry assets and identifying places where additional investments can be made. Urban parcels are ranked on their suitability for increased tree canopy, water quality improvement and watershed management, habitat conservation, and community livability (noise and pollution reduction, urban cooling).

The Urban Forest Management Plan is undergoing environmental review and is expected to be presented to City Council in late 2015 for adoption.

PEIR Chapter 3. Environmental Impacts and Mitigation Measures.

A. Land Use, page 3.A-21

The actions proposed in the current CAP do not calculate the resources to double tree cover (from current estimate of 4 to 7 percent, to target of 15 percent). Therefore the PEIR may incompletely describe the environmental impacts.

The most recent tree inventory (2002) shows that there are about 200,000 street trees in San Diego.^{iv} As there is no recent inventory of trees on private land, the assumption (for this letter) is that street trees are 20% of the total trees, and therefore the rough estimate is that there are 1,000,000 trees in the City. To double the tree canopy, land use changes need to provide for 1,000,000 more trees to be planted on public and private land.

These changes in land use, and their resulting environmental impacts (positive and negative) result from tree planting opportunities on several categories of public and private property in the City:

- Streets and parkways, with City funding
- Parks, community centers, with City funding

AH-2

AH-3

Response to Comment AH-3**A – Land Use.**

Draft EIR Chapter 3.A, Land Use, evaluates the consistency of the CAP with existing land uses and related planning documents, such as the City of San Diego General Plan. Page 3.A-14 lists the Significance Criteria and Significance Determination Thresholds used to determine whether the CAP would potentially cause a significant impact with respect to Land Use. Because the CAP has been prepared to be consistent with the City's General Plan, and to further implement General Plan Policy CE-A.2, which calls for a reduction in the City's carbon footprint, the CAP is found to be consistent with General Plan policies, and not to cause a significant impact with respect to Land Use. In addition, General Plan Policy CE-A.2 specifically calls for the adoption of new or amended regulations that would "reduce the urban heat island effect through sustainable design and building practices, as well as planting trees (consistent with habitat and water conservation policies) for their many environmental benefits, including natural carbon sequestration." The Urban Tree Planting Program targets included in Strategy 5 of the CAP, would contribute to this effort, and therefore, would be consistent with the City's General Plan.

B – Visual Effects and Neighborhood Character.

Draft EIR Section 3.B, Visual Effects and Neighborhood Character, evaluates the potential effects of the CAP on visual resources and neighborhood character. The impact analysis in this section discusses implementation of CAP Action 5.1, Urban Tree Planting Program, such that the planting of new trees would adhere to policies contained in the General Plan, community plans, and the Urban Forest Management Plan. Conforming to existing policies and plans will allow implementation of the Urban Tree Planting Program without causing an adverse impact on scenic views. This Section of the Draft EIR also acknowledges that "...trees themselves add aesthetic value..." thereby stating a potential benefit of the Urban Forest Management Plan for visual resources and neighborhood character.

LETTER

RESPONSE

Comment Letter AH

Letter from CFAB about PEIR for Climate Action Plan (CAP), September 29, 2015, page 4

- Open space (this is limited as much of the acreage is committed to Multiple Species Habitat Areas for native vegetation)
- Schools, colleges, and other public properties
- Residential properties (front and back yards)
- Replacement of trees required in development permits (trees in parking lots, commercial properties, common areas in developments)
- Fruit trees, in community gardens, residential and commercial properties

B. Visual Effects and Neighborhood Character

Trees make an important contribution to human experiences in the city, as identified in the Urban Design (UD) section of the 2008 General Plan, which provides for the following:

UD-A.12. g. Retrofit existing expansive parking lots with street trees....

UD-A.12. i. Use trees and other landscape to provide shade, screening, and filtering of storm water runoff in parking lots.

UD-C.7. d. Implement pedestrian facilities and amenities in the public right-of-way including wider sidewalks, street trees.....

The PEIR needs to address the compliance inspections and enforcement for trees in development permits, and require the replacement of missing trees around buildings and in parking lots.

In B.4 Impacts and Mitigation Measures, the list of significant impacts includes, "The loss of any distinctive or landmark tree(s) or stand of mature trees as identified in the community plan. Yet most community plans do not identify these.

Impact Analysis (page 3.B.21) included the claim, "Street and landscaping trees have the potential to alter or block scenic views and vistas, and to alter neighborhood character." Further description of the Urban Tree Planting Program (page 3.B-23) identifies the potential of trees to block or alter scenic views, but the creation of more positive scenic views with trees is not mentioned. Many community plans identify scenic corridors.

The following is identified as an impact (page 3.B-23), yet should not be allowed by the City: "Trees that grow to the point that they do obstruct scenic views can be pruned, topped, or removed, which would mitigate the impact." Topping trees is a prohibited xxxv not a professional tree care practice, and this should be removed from the report. The unprofessional topping of trees added as an impact in another section.

The aesthetic value of trees to urban landscapes is acknowledged at the bottom of page 3.B-25. Further description of tree benefits should be added to this section.

C. Air Quality

The PEIR acknowledges that the City's General Plan has a strong policy advocating the preservation and planting of trees (CE-F.4, listed on page 3.C-17).

The benefits of Strategy 5 (urban tree canopy increase) need to be clearly articulated in the Impact Analysis (page 3C-18).

F. Transportation and Circulation

AH-3

C – Air Quality.

Comment noted. Action 5.1: Present to City Council for consideration a city-wide Urban Tree Planting Program has been added to the analysis in Chapter 3C, Air Quality.

F – Transportation and Circulation.

Draft EIR Chapter 3.F, Transportation and Circulation, evaluates the potential transportation impacts that could result from implementation of the CAP. In the Regulatory Setting section, the Draft EIR lists policies included in the General Plan that pertain to transportation and circulation, including ME-A.7, which is related to improving walkability through pedestrian-oriented design of projects. This includes enhancing streets and other public rights-of-way with amenities such as street trees, and using trees as part of non-contiguous sidewalk design. On page 3.F-18, in the discussion of Issue 3, the Draft EIR states that the CAP would implement the City of San Diego's Pedestrian Master Plan, which would enhance pedestrian facilities and connectivity. This plan includes a discussion of how trees promote walkability, and includes goals for creating pedestrian facilities that offer amenities such as street trees. Since the CAP would implement the Pedestrian Master Plan, these amenities are recognized as benefits related to pedestrian facilities.

G – Utilities.

Comment noted.

H – Water Supply.

Draft EIR Chapter 3.H, Water Supply, evaluates the potential impacts on water supply that could result from implementation of the CAP. In the Regulatory Setting section, the Draft EIR lists regulations pertaining to water supply, including the City's Urban Water Management Plan which includes provisions for watering trees during drought conditions, as well as policies included in the General Plan that support urban forestry, such as CE- D.1.e. Conformance to these existing plans and policies will allow for adequate watering of trees planted as part of the CAP Urban Forest Management Plan.

Comment Letter AH

Letter from CFAB about PEIR for Climate Action Plan (CAP), September 29, 2015, page 5

The PEIR acknowledges that the City's General Plan has a policy that addresses the value of non-contiguous sidewalk design, and the allowance of contiguous sidewalks with trees planted in grates adjacent to the street (ME-A.7. c, listed on page 3.F-8). Further benefits need to be identified for streets as they enhance the "walkability" and thus encourage active transportation for work, shopping and leisure activities.

G. Utilities

The PEIR acknowledges that the City's General Plan has a policy for reducing the amount of impervious surfaces through selection of materials, site planning, and street design where possible (CE-E.2c and CE-E.2d, listed on page 3.G-15). This can increase tree cover, and will reduce the heat absorption by streets and buildings that contribute to the "urban heat island" effect.

H. Water Supply

The PEIR acknowledges the application of water conservation measures to minimize water use for tree plantings, use of drought-tolerant plants, and prioritizing planning in areas with recycled water and grey water infrastructure (page 3.H-12). In the Impacts Analysis (page 3.H-14), the water conservation measures are listed, but the losses relating to insufficient tree watering are not outlined.

Water availability, cost, and the current drought have raised concerns about planting and watering trees. Yet trees provide important benefits and will shade and cool for the climate warming that is predicted. Small, low water trees need only about 15-20 gallons a month (about one shower) and large and mature, low water trees need about 30-40 gallons a month (one load of laundry), all with deep, infrequent watering. Additionally, trees shade other landscaping, reducing its water needs.

The City's Urban Water Management Plan <http://www.sandiego.gov/water/pdf/uwmp2010.pdf> provides for trees and shrubs to be watered under all drought restriction level (including level 4), and the PEIR should confirm the importance of retaining those policies. In many locations, the City needs to make investments in landscaping systems and zones that allow for trees to be provided deep soaking at infrequent (monthly) intervals.

PEIR Chapter 8. Alternatives

An "environmental justice" alternative is important to consider. There is substantial benefit to preferentially planting and caring for trees in communities that have few street trees, low park acreage, high health risks, and limited incomes. Analysis of the (outdated) 2003 tree inventory showed that trees per street mile is lowest in such neighborhoods as Barrio Logan, Midway, Linda Vista, City Heights and Southeast.^{vi}

Strategy 2 = Clean and Renewable Energy.

There is no mention of the impacts of trees shading solar energy panels, or the impacts of solar energy panels on trees. The PEIR needs to address the tree losses, or lost opportunities for planting trees, when raised solar panel arrays are installed.

Additional comments

The positive environmental benefits of trees are well documented^{vii} and include these most directly related to climate mitigation and adaptation. Trees are one of the few infrastructure investments that grow in value over time.

AH-3

AH-4

AH-5

Response to Comment AH-4

Regarding the Environmental Justice Alternative, please see Response to Comment AD-4. Regarding CAP Strategy 2, a supporting measure for Action 2.1 provides for policies, programs, and ordinances that facilitate and promote siting of new onsite photovoltaic energy generation and energy storage systems. Regarding the potential for CAP Action 5.1 not be implementable due to the loss of land to solar arrays, please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

Response to Comment AH-5

Please see Response to Comment AH-3.

Comment Letter AH

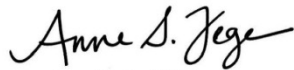
Letter from CFAB about PEIR for Climate Action Plan (CAP), September 29, 2015, page 6

- Trees absorb carbon dioxide and store carbon in wood (carbon sequestration).
- Trees insulate homes and businesses from extreme temperatures, keep properties cool, and reduce air conditioning utility bills.
- Trees reduce the “urban heat island effect.” They shade buildings, roads and sidewalks so they absorb less radiation during the day; absorb less radiation because of the color and material properties of leaves; and release moisture by evapotranspiration that cools the air.
- Shade trees return oxygen to the air and reduce air pollution by absorbing ozone, nitrogen dioxide, sulfur dioxide, and some particulate matter.
- Trees enhance stormwater, soil erosion control for more ___ storm events.
- Trees provide habitat for birds and other wildlife, and reduce noise for humans

↑
AH-5
↓

The Community Forestry Advisory Board and many local urban forestry professionals, landscape architects, and planners are committed to enhancing the urban tree canopy and its benefits, and can contribute information and strategies to the EIR. We recognize trees as valued City assets that provide many services to residents, businesses, and visitors, and that will contribute to climate change mitigation and adaptation.

Sincerely,



Anne Fege, Ph.D., M.B.A.
Chair, Community Forest Advisory Board
afege@aol.com, 858-472-1293

cc:
CFAB Board
L.Henegar and M.Garcia-City Planning Staff
Community-based climate action groups
SD Regional Urban Forests Council, Environment-Design Council

Footnotes:

ⁱ Community Forest Advisory Board, <http://www.sandiego.gov/economic-development/about/cfab.shtml>

ⁱⁱ Benefits and economic values computed with iTree software from the USDA Forest Service, www.itreetools.org

ⁱⁱⁱ Alliance for Community Trees. 2011. Alliance for Community Trees. 2011. Benefits of trees and urban forests: A research list. Unpublished white paper, 19 pp. (References 23 and 42) Available at http://www.actrees.org/files/Research/benefits_of_trees.pdf.

^{iv} Streets Division completed this inventory in 2002, for trees in public rights-of-way but not in assessment districts. Data available as the “Trees_SD” database at the San Diego Association of Governments. From Mike Klein, GIS Specialist, Planning Department, personal communication, October 8, 2014.

^v California Government Code, 53067. Tree pruning, legislative declaration; specifications, <http://www.ufci.calpoly.edu/files/pubs/CGC53067-TreePruning.pdf>

^{vi} City of San Diego Community Forest Advisory Board. 2013. Urban Forest Management Plan:

background and current conditions. Available at http://sdapa.org/go/wp-content/uploads/2013/10/CitySD_UFMPPlan_2013-02-12.pdf

^{vii} Alliance for Community Trees. 2011. Benefits of trees and urban forests: A research list. Unpublished white paper with citations of source documents, 19 pp. Available at http://www.actrees.org/files/Research/benefits_of_trees.pdf.

LETTER

RESPONSE



Comment Letter AI
Circulate San Diego
 1111 6th Avenue, Suite 402
 San Diego, CA 92101
 Tel: 619-544-9255
 Fax: 619-531-9255
 www.circulatesd.org

September 29, 2015

Ms. Rebecca Malone
 City of San Diego Planning Department
 1222 First Avenue, MS 501
 San Diego, CA 92101

RE: San Diego Climate Action Plan Draft PEIR Comments

Dear Ms. Malone,

On behalf of Circulate San Diego, whose mission is to create excellent mobility choices and vibrant, healthy neighborhoods, we are pleased to submit these comments on the City of San Diego's Climate Action Plan (CAP) Draft Programmatic Environmental Impact Report (PEIR). Circulate San Diego is, a regional non-profit organization dedicated to creating great mobility choices, more walkable and bikeable neighborhoods, and land uses that promote sustainable growth.

We support the CAP's legally-binding greenhouse gas reduction targets. In committing to and meeting these targets, the City will be doing its part in helping the state meet its 2020, 2030, and 2050 targets and be a leading example of addressing climate change regionally, statewide, and nationally. Further, actions required to meet the targets build on a foundation of policies and programs already in place.

AI-1

Based on our review of the EIR document, we would like to offer the following recommendations.

1. *Develop a 1-Year Implementation Plan.* To ensure success of the Plan, implementation steps should be outlined. These steps can be outlined for the first year, specifically, to launch key strategies of the Plan and help budget necessary resources.

An example of budgeting needs includes, but is not limited to, infrastructure improvements needed to implement the Bicycle and Pedestrian Master Plans. Specifically, we recommend a share of transportation funds to match the CAP's proposed mode-share goals and the expenditure of these funds in areas where traffic collisions have been concentrated, namely disadvantaged neighborhoods, as outlined in the Vision Zero Resolution adopted by the Infrastructure Committee September 16, 2015.

AI-2

Other exemplary budgeting needs could include tree planting sufficient to implement the Urban Forest Management Plan and 2020 goals.

Creating excellent mobility choices and vibrant, healthy communities.

Response to Comment AI-1

This comment does not address the adequacy of the Draft EIR. Comment noted.

Response to Comment AI-2

This comment does not address the adequacy of the Draft EIR. Comment noted. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

Comment Letter AI

2. *Coordinate Final Review of Pending Community Plan Updates with Final Review of Climate Action Plan.* Several community plan updates are currently underway or in the pipeline. These plans are key to implementing the Climate Action Plan. In addition to the CAP Consistency Checklist (Appendix A) developed for proposed development projects, the City should provide a CAP Consistency Checklist for Community Plan Updates to ensure these updates implement the CAP at the neighborhood scale, prior to Council adoption of the relevant community plan update. The City of San Diego should also publish or attach these checklists as backups to docket items on City Council agenda items. Success metrics should include reduction of Vehicle Miles Travelled (VMT) and improvement of air quality. *Regional Transportation Planning and Funding – Leverage City Position at SANDAG.* We support the mode-shift goals outlined in the CAP and believe these targets are achievable through appropriate expenditures, policies, programs and actions. As we have recently described in our report "[New Climate for Transportation](#),"¹ the City of San Diego should use its influence on the SANDAG Board to accelerate and increase transit, walking and bicycling infrastructure expenditures to benefit San Diego residents and help achieve GHG reduction goals. Specifically, SANDAG's Plan projects 15% of San Diegans would use alternate transportation by 2035 compared to the City's projection of 50%.
3. *Regional Transportation Planning and Funding – Leverage City Position at SANDAG.* *Regional Transportation Planning and Funding – Leverage City Position at SANDAG.* We support the mode-shift goals outlined in the CAP and believe these targets are achievable through appropriate expenditures, policies, programs and actions. As we have recently described in our report "[New Climate for Transportation](#),"² the City of San Diego should use its influence on the SANDAG Board to accelerate and increase transit, walking and bicycling infrastructure expenditures to benefit San Diego residents and help achieve GHG reduction goals. Specifically, SANDAG's Plan projects 15% of San Diegans would use alternate transportation by 2035 compared to the City's projection of 50%.
4. *Integrate Language on Social Equity into Goals, Targets and Actions in Chapter 3.* The Bicycling, Walking, Transit and Land Use strategy has many opportunities to focus resources where they are needed most to not only achieve GHG reductions but also community health and safety. As commented in the CAP Scoping Plan, we support the prioritization of related actions in disadvantaged neighborhoods ranked in the top 25 percent of CalEnviroScreen's ranking for the San Diego region. Some examples include:
- Facilitate and support Transit Oriented Development throughout the City, starting in neighborhoods that are most impacted by climate change, as identified in the CalEnviroScreen.
 - Improve bicycling and pedestrian infrastructure throughout the City and increase access to transit, starting in neighborhoods that are most impacted by climate change, as identified in the CalEnviroScreen.

AI-3

AI-4

AI-5

¹ Circulate San Diego and Climate Action Plan, *New Climate for Transportation (2015)*.
http://circulatesd.nationbuilder.com/new_climate_for_transportation, 2015.

Response to Comment AI-3

Please see Response to Comment N-3.

Response to Comment AI-4

Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting.

Response to Comment AI-5

This comment does not address the adequacy of the Draft EIR. Comment noted.

LETTER

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Comment Letter AI

- Improve bicycle and pedestrian infrastructure around the City's most dangerous corridors. The neighborhoods most affected by climate change broadly overlap the neighborhoods where a substantial portion of traffic injuries and death occur.

AI-5

5. *Include SB743 in Section F – Transportation and Circulation, Regulatory Setting, State.* SB743 is relevant to the CAP as it creates a process to change the way transportation impacts are analyzed under CEQA. The Governor's Office of Planning and Research has issued its draft set of guidelines to establish VMT reduction as an alternate way to measure transportation impacts. The draft guidelines criticize the use of vehicular Level of Service as forcing more road construction, minimizing transit use, and endangering bicyclists and

AI-6

Include VMT Reduction in Section F.4 – Impacts for Mitigation Measures, Significance Criteria (P.3.F-12). Following the suggestion above, please include the reduction of VMT as part of these criteria, specifically, 'Result in a reduction of VMT'.

Thank you for the opportunity to comment on this important plan. We look forward to working with the City to implement the Climate Action Plan strategies.

Sincerely,

Kathleen Ferrier, AICP
Director of Advocacy

Creating excellent mobility choices and vibrant, healthy communities.

Response to Comment AI-6

The California Governor's Office of Planning and Research issued a draft set of guidelines on August 6, 2014, and are in the process of developing a revised draft which will be released for additional public review for the implementation of SB 743. Future projects would be analyzed in accordance with those guidelines once they have been finalized.

LETTER

RESPONSE

Comment Letter AJ

Rancho Bernardo Community Planning Board

P.O. Box 270831, San Diego, CA 92198
www.rbplanningboard.com

September 17, 2015

Ms. Rebecca Malone
 City of San Diego, Planning Department
 1222 First Avenue, MS 501
 San Diego, CA 92101

RE: Comments on Draft City of San Diego Climate Action Plan and Draft Program Environmental Impact Report for the Draft Climate Action Plan

Dear Ms. Malone:

The Rancho Bernardo Community Planning Board appreciates the opportunity to provide comments on the City's draft Climate Action Plan and draft Program Environmental Impact Report (PEIR) for the draft Climate Action Plan (CAP). Presented below are the comments approved (by a vote of 8-0-0) for submittal to the Planning Department at the Planning Board's meeting of September 17, 2015.

Draft Climate Action Plan

The Rancho Bernardo Community Planning Board supports the City's proposal, as described in the draft Climate Action Plan (CAP), to pursue the local generation of clean energy as that is clearly an effective way to reduce greenhouse gas (GHG) emissions. That being said, the Planning Board has concerns regarding the effectiveness of other aspects of the draft CAP plan, as described below.

- According to the draft CAP, approximately 54 percent of community wide emissions are attributed to transportation, yet proposals to reduce these emissions do not appear to meet the challenge of substantially reducing vehicle trips. Coordination with other agencies, particularly MTS, is necessary in order to effectively reduce total GHG emissions in the City. Although great ideas for local travel, bicycle paths and pedestrian walkways will have little effect on commuters who live outside the higher density areas of the City, particularly those commuters traveling significant distances from home to job and back. Proposals should include local transit options that provide access from rapid bus lines and trolley stops to surrounding employment centers such as the Rancho Bernardo Industrial Park. These local transit options would also provide opportunities to reduce local community trips to medical facilities, school, and commercial developments in a community.
- Under Strategy 3 – Bicycling, Walking, Transit, and Land Use, Action 3.6 promotes the implementation of transit oriented development within Transit Priority Areas. The Transit Priority Areas proposed in the SANDAG 2050 RTP clearly have not taken into consideration topography, availability of local transit to connect with regional transit facilities, or distance from major transit areas. This is true in Rancho Bernardo, Otay Nestor, Ocean Beach, and the Sports Arena area. Changing land uses to increase density in the vicinity of, but not easily accessible to transit, only

AJ-1

Response to Comment AJ-1

This comment does not address the adequacy of the Draft EIR. Comment noted. Please see CAP Chapter 3 regarding CAP implementation monitoring and reporting, including annual reporting. The Transit Priority Areas map is based on the adopted SANDAG 2050 Regional Transportation Plan (RTP).

LETTER

RESPONSE

Comment Letter AJ

exacerbates current congestion problems on local streets and surrounding freeways. Transit-oriented development must be truly transit-oriented with easily accessible transit within reasonable walking distance of a development or assurances that local transit will be available to make the connection from the development to the transit station as the time that the new units are occupied.

- With respect to Strategy 5 – Climate Resiliency, the Planning Board supports the goal is to increase tree canopy coverage in the City. We do not however understand why this is included as a Phase 2 action when the Urban Forest Management Plan has already undergone public review and should be ready for approval. Increasing the tree canopy in the City should be one of the easier actions to implement and should begin now.
- It is unclear how the Pure Water Program described in the Adaptation chapter of the draft CAP represents efficient use of energy when a portion of the water to be used for irrigation would undergo advanced water purification, which undoubtedly requires more energy to produce than does water that comes directly from the North City Water Reclamation Plant (NCWRP). To save energy and money, the Rancho Bernardo Community Planning Board continues to support the extension of recycled water from NCWRP into Rancho Bernardo to be used for landscaping and appropriate industrial uses.
- An adaptation measure that should be addressed in the CAP is the capture of rainwater for reuse as irrigation water. Such systems should be incorporated into all forms of new development, including residential, commercial, and industrial uses.
- Finally, the Climate Action Plan should clearly describe how the City will monitor development and subsequent City Council actions to ensure that the baseline established for “activities covered by the plan” is not altered by land use decisions that result in higher development intensities or significant increases in trip generation. Should the baseline be substantially altered by such decisions, “the level below which the contribution of GHG is not considered cumulative” must be revisited.

AJ-1

Draft EIR for the draft Action Plan

- Mitigation measure LU-1 includes appropriate guidance for siting large-scale renewable energy projects; however, it is unclear how development and implementation of these guidelines are actually assured. We would also recommend that these guidelines address the need to minimize impacts related to lighting and glare from these projects. This change should also be reflected in Issue 3 under Visual and Neighborhood Resources in Table ES-1 and in the appropriate section of the final EIR.

AJ-2

Thank you again for the opportunity to provide our comments.

Sincerely,



Mike Lutz
Chair, Rancho Bernardo Community Planning Board

cc: Councilmember Mark Kersey, District 5

Response to Comment AJ-2

Please see Response to Comment AE-4. Mitigation Measure LU-1 has been revised to add minimization of lighting and glare.

CITY OF SAN DIEGO CLIMATE ACTION PLAN

Final Program Environmental Impact Report

SCH# 2015021053

November 2015

Prepared for:
City of San Diego Planning Department
1010 Second Avenue
San Diego, California 92101

Prepared by:
ESA



Mayor Kevin L. Faulconer



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LIST OF ACRONYMS

San Diego Climate Action Plan Final Program Environmental Impact Report

AB	Assembly Bill
ADT	Average Daily Trips
AF	acre-feet
AICUZ	Air Installations Compatible Use Zones
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plans
AMSL	above mean sea level
APCD	Air Pollution Control District
APS	alternative planning strategy
AQMD	Air Quality Management District
ARPA	Archeological Resources Protection Act
ATCM	airborne toxics control measure
BACT	best available control technology
BAU	business-as-usual
BLS	Bureau of Labor Statistics
BMP	best management practices
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
Cal-Am	California American Water Company
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards
Caltrans	California State Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CAS	Climate Change Adaptation Strategy
CBC	California Building Code
CCA	Community Choice Aggregation
CCAT	California Climate Action Team
CCR	California Code of Regulations
C&D	Construction and Demolition
CDFW	California Department of Fish and Wildlife
CDPH	California Department of Public Health
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFC	chlorofluorocarbons
CFL	compact fluorescent lamps
CH ₄	methane
CLUP	Comprehensive Land Use Plan
CMAP	Climate Mitigation and Adaptation Plan

CMP	Congestion Management Program
CNRA	California Natural Resources Agency
CO	Carbon Monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
CoSWMP	County Solid Waste Management Plans
CPAP	Climate Protection Action Plan
CPRC	California Public Resources Code
CPTED	Crime Prevention Through Environmental Design
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CWA	Clean Water Act
DOC	Department of Conservation
DPM	diesel particulate matter
DPR	Department of Parks and Recreation
DWR	Department of Water Resources
E&RA	Environmental and Resource Analysis Division
EIR	Environmental Impact Report
EMF	electromagnetic frequency
EO	Executive Order
ESL	Environmentally Sensitive Lands
°F	degrees Fahrenheit
FAA	Federal Aviation Administration
FCAAA	Federal Clean Air Act Amendments
FERC	Federal Energy Regulatory Commission
FIP	Federal Implementation Plan
GSA	groundwater sustainability agency
GHG	greenhouse gas
GWP	global warming potential
HAP	Hazardous Air Pollutant
HFC	hydrofluorocarbons
HOV	High-Occupancy Vehicle
HRB	Historical Resources Board
I-5	Interstate 5
I-8	Interstate 8
IBWC	International Boundary & Water Commission
IP	Internet Protocol
IPCC	International Panel on Climate Change
IRWMP	Integrated Water Management Plan
IWMA	California Integrated Waste Management Act of 1989
IWMP	Integrated Waste Management Plans
LCFS	Low Carbon Fuel Standard
LCP	Local Coastal Program
LDC	Land Development Code
LEA	Local Enforcement Agency
LED	light emitting diode
LNG	liquefied natural gas
LOS	level of service
LOSSAN	Los Angeles to San Diego rail corridor
LVW	loaded vehicle weight
MAP-21	Moving Ahead for Progress in the 21st Century Act
MBTA	Migratory Bird Treaty Act
MCBCP	Marine Corps Base Camp Pendleton

mgd	million gallons per day
MMRP	Mitigation, Monitoring and Reporting Program
MMT	million metric tons
MHPA	Multi-Habitat Planning Area
MPO	Metropolitan Planning Organization
MRZ	Mineral Resource Zone
MSCP	Multiple Species Conservation Program
MTS	Metropolitan Transit System
MWD	Metropolitan Water District of Southern California
NAAQS	National Ambient Air Quality Standards
NCCP	Natural Community Conservation Planning
NCTD	North County Transit District
NCWRP	North City Water Reclamation Plan
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutant
NHPA	National Historic Preservation Act
NOA	Notice of Availability
NOP	Notice of Preparation
NO _x	nitrogen oxides
N ₂ O	nitrous oxide
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
OAL	Office of Administrative Law
OPR	Governor's Office of Planning and Research
OSHA	Occupational Safety and Health
PACE	Property-Assessed Clean Energy
PEIR	Program Environmental Impact Report
PFC	perfluorocarbons
PLWTP	Point Loma Wastewater Treatment Plant
PM	particulate matter
POU	publicly owned utility
PPD	pounds per person per day
ppm	parts per million
PRC	Public Resources Code
PUD	Public Utilities Department
PV	solar photovoltaic
RAC	Regional Advisory Committee
RAQS	Regional Air Quality Strategy
RCP	Regional Comprehensive Plan
RCRA	Resource Conservation and Recovery Act of 1976
REC	Renewable Energy Credit
RES	Regional Energy Strategy
ROG	reactive organic gases
RPS	Renewable Portfolio Standard
RTP	Regional Transportation Plans
RWMG	Regional Water Management Group
RWQCB	Regional Water Quality Control Board
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SANDAG	San Diego Association of Governments
SB	Senate Bill
SBWRP	South Bay Water Reclamation Plant
SCH	State Clearinghouse

SCS	Sustainable Communities Strategy
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SDAQMD	San Diego Air Quality Management District
SDCWA	San Diego County Water Authority
SDG&E	San Diego Gas & Electric Company
SDWA	Safe Drinking Water Act
SEMMS	Smart Energy Management & Monitoring System
SF ₆	sulfur hexafluoride
SFHA	Special Flood Hazard Areas
SGMA	Sustainable Groundwater Management Act
SIP	State Implementation Plans
SO ₂	Sulfur dioxide
SR-56	State Route 56
SR-75	State Route 75
SR-94	State Route 94
SR-125	State Route 125
SR-163	State Route 163
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	California State Water Resources Control Board
TAC	toxic air contaminants
TCM	Transportation Control Measures
TDA	California Transportation Development Act
TDM	Traffic Demand Management
TMDL	Total Maximum Daily Load
TPA	Transit Priority Areas
UNFCCC	United Nations Framework Convention on Climate Change
U.S. EPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
UWMP	Urban Water Management Plan
VMT	vehicle miles traveled
WPCP	Water Pollution Control Plan
WTP	Water Treatment Plant
µg	micro grams

EXECUTIVE SUMMARY

A. Introduction

This Program Environmental Impact Report (PEIR) has been prepared by the City of San Diego (City or lead agency) for the City of San Diego Draft Climate Action Plan (CAP) (hereafter referred to as the “proposed Project” or “Project”). This summary provides a brief synopsis of the Project, the results of the environmental analysis contained in this PEIR, and the Project alternatives that were considered.

The California Environmental Quality Act (CEQA) requires that all State and local government agencies consider the environmental consequences of programs and projects over which they have discretionary authority before taking action on those projects or programs. Where there is substantial evidence that a project may have a significant effect on the environment, the agency shall prepare an environmental impact report (EIR) (CEQA *Guidelines* Section 15164[a]). An EIR is an informational document that will inform public agency decision makers and the general public of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.

CEQA requires that a Draft EIR be prepared and circulated for public review. Following the close of the public review period, the lead agency prepares a Final EIR, which includes the comments received during the review period (either verbatim or in summary), responses to the significant environmental issues raised in those comments, and any necessary revisions to the Draft EIR. Prior to taking action on a proposed project the lead agency must certify the EIR and make certain findings.

B. Project Location and Description

The City of San Diego is located within San Diego County in the southwestern corner of California. San Diego County is bordered by the Pacific Ocean on the west, Riverside County to the north, Imperial County to the east, Orange County at the northwest corner, and the Republic of Mexico to the South. The planning area for the CAP is the City of San Diego General Plan (2008) planning area, which encompasses all land within the city limits and prospective annexation areas. The city includes approximately 332 square miles of land separated into 55 community planning areas.

The CAP has been developed in response to State legislation and policies that are aimed at reducing California’s greenhouse gas (GHG) emissions. This includes Executive Order S-3-05,

which established the 2050 statewide GHG reduction target of 80 percent below 1990 levels, Executive Order B-30-15, which established the 2030 statewide GHG reduction target of 40 percent below 1990 levels, and Assembly Bill 32, the Global Warming Solutions Act, which tasked the California Air Resources Board (CARB) with creating the Climate Change Scoping Plan (Scoping Plan) to establish a 2020 interim target and to provide a path for local governments to contribute their fair share of the GHG emission reductions necessary to achieve the target.

The CAP is intended to ensure the City of San Diego contributes its fair share of GHG reductions through local action. The CAP identifies five primary strategies implemented by 17 actions and 32 supporting measures, which together will meet GHG reduction targets for 2020, as well as an interim target set for 2035. The CAP is a comprehensive document that serves as a framework for City GHG reduction strategies, and that includes requirements for monitoring and periodic updates to ensure the City is achieving its GHG reductions targets.

C. Project Objectives

The objectives of the CAP are to:

- Provide a roadmap to achieve GHG reductions;
- Conform to California laws and regulations;
- Implement climate action policies of the General Plan;
- Provide CEQA streamlining for GHG emissions from new developments;
- Create green jobs through incentive-based policies, such as the manufacture and installation of solar panels;
- Improve public health by removing harmful pollutants from our air and improve water quality;
- Increase local control over the City's future by reducing dependence on imported water and energy;
- Enhance quality of life by supporting active transportation, planting trees and reducing landfill waste; and
- Save taxpayer money by decreasing municipal water, waste, and energy usage in City-owned buildings.

D. CEQA Compliance

This Draft PEIR was prepared in compliance with CEQA and the *CEQA Guidelines* (California Code of Regulations, Title 14). As described in *CEQA Guidelines* Section 15121(a), an EIR is a public information document that assesses the potential environmental effects of a project, and that also identifies mitigation measures and alternatives to the project that could reduce or avoid adverse environmental impacts. The *CEQA Guidelines* require that State and local government agencies consider the environmental consequences of a project over which they have discretionary authority. Consequently, the Draft PEIR is an informational document used in the planning and

decision-making process. It is not the purpose of an EIR to recommend either approval or denial of a project. The procedures required by CEQA “are intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects (Public Resources Code Section 21002).”

This Draft PEIR was submitted to the State Clearinghouse (SCH # 2015021053) and released for public and agency review on July 31, 2015. The public review period extends for a 60-day period, until September 29, 2015. A copy of the Notice of Preparation dated February 18, 2015, requesting public comment, as well as the written and oral comments received, are included in Appendix A.

E. Environmental Analysis

The PEIR addresses in detail the following environmental topics: land use, visual and neighborhood resources, air quality, greenhouse gases, historical resources, traffic and circulation, utilities, and water supply. A discussion of topics found not to be significant can be found in Chapter 7, and includes: agricultural resources, biological resources, geologic conditions, health and safety and hazardous materials, hydrology and water quality, mineral resources, noise, paleontological resources, and public services and facilities.

Potentially significant environmental impacts of the proposed Project are summarized in **Table ES-1**. This table lists impacts and mitigation measures in three major categories: significant impacts that would remain significant even with mitigation (significant and unavoidable); significant impacts that could be mitigated to a less than significant level (significant but mitigable); and impacts that would not be significant (less than significant).

For each significant impact, the table includes a summary of feasible mitigation measure(s) and an indication of the level of significance of the impact following implementation of mitigation measures. A complete discussion of each impact and associated mitigation measure is provided in Chapter 3, *Environmental Setting, Impacts, and Mitigation Measures*.

F. Significant and Unavoidable Impacts

The Project, if implemented, could result in significant adverse environmental impacts. Mitigation measures proposed as part of the Project or added in this EIR would avoid or reduce most of the impacts to a less-than-significant level (see Table S-1). After mitigation, the following impacts could remain significant, and should be considered an unavoidable consequence of the project:

Issue B.1: Visual Effects and Neighborhood Character: Implementation of the CAP could affect the visual quality of the planning area, particularly with respect to views from public viewing areas, vistas, or open spaces.

Issue B.2: Visual Effects and Neighborhood Character: Implementation of the CAP could introduce incompatible uses with surrounding development in terms of bulk, scale, materials, or style that would result in adverse visual impacts.

Issue C.2: Air Quality: Implementation of the CAP could result in air emissions that would substantially deteriorate ambient air quality, including the exposure of sensitive receptors to substantial pollutant concentrations.

Issue E.1: Historic Resources: Implementation of the CAP could cause a substantial adverse change in the significance of a historical resource, as defined in Section 15064.5, or have other physical or aesthetic effects to a prehistoric or historic building, structure, object or site.

Issue F.2: Transportation and Circulation: Implementation of the CAP could create substantial alterations to present circulation movements including effects on existing public access points and/or resulting from anticipated changes in transportation modes.

G. Effects Found Not to be Significant

As required by Section 15128 of the CEQA *Guidelines*, an EIR must contain a brief discussion stating the reasons why certain environmental effects of the CAP were determined not to be significant and are therefore not discussed in detail in this PEIR. In accordance with the CEQA *Guidelines*, Chapter 7, Other CEQA Considerations, discusses the environmental issue areas where impacts were found to not be significant. The Project is not expected to have an adverse effect on the environment related to: agricultural resources, biological resources, geologic conditions, health and safety and hazardous materials, hydrology and water quality, mineral resources, noise, paleontological resources, or public services and facilities.

H. Project Alternatives

Alternatives to the proposed Project are addressed in detail in Chapter 8 of the EIR and are summarized as follows:

- **No Project Alternative** - The No Project Alternative represents a continuation of the City's existing General Plan (adopted in 2008) without the adoption of the Draft Climate Action Plan (see CEQA *Guidelines*, Section 15126(e)(3)(A)).
- **The Climate Mitigation and Adaptation Plan (CMAP) Alternative** – This alternative would substitute another climate action plan that was prepared by the City in 2012, but never adopted. The CMAP Alternative includes somewhat different strategies and actions for reducing GHGs than the CAP.

Based upon the evaluation described in Chapter 8.0, Alternatives, ~~both the No Project Alternative and the CMAP Alternative would have greater~~ fewer impacts related to Land Use, Visual Effects and Neighborhood Character, and Air Quality GHGs than the proposed CAP. Therefore, the CMAP Alternative ~~Project as proposed~~ is considered the Environmentally Superior Alternative.

I. Major Conclusions, Areas of Controversy, and Issues to be Resolved

The EIR found that the Project would result in significant effects to: Land Use, Visual Effects and Neighborhood Character ~~Resources~~, Air Quality, Greenhouse Gases, Historical Resources, and Traffic and Circulation. As shown in Table ES-1 below, all impacts identified can be mitigated to a less-than-significant level, except the impacts on Visual Effects and Neighborhood Character, Air Quality, Historical Resources, and Transportation and Circulation.

CEQA *Guidelines* Section 15123 specifies that the EIR summary shall identify “areas of controversy” known to the Lead Agency including issues raised by agencies and the public, and issues to be resolved including the choice among alternatives and whether or how to mitigate the significant effects.

The City received numerous comment letters and oral comment in response to the NOP. A number of issues were raised. Among these include suggestions to focus CAP actions and strategies such that they provide benefit specifically for environmental justice communities – that is, low income communities and communities of color. Other comments state that CAP actions should be enforceable and should emphasize programs that benefit public health, including reduction of air pollutant emissions other than GHGs.

Issues raised in NOP comments were considered during preparation of this Draft PEIR, in Chapter 3 and in Chapter 8, Alternatives.

TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact and Level of Significance	Mitigation Framework	Level of Significance after Mitigation
A. Land Use		
Issue 1: Would implementation of the CAP conflict with applicable land use plans, policies or regulations of an agency with jurisdiction over the Project? (Significant)	<p>Mitigation Measure LU-1: Siting of Large-scale Renewable Energy Projects.</p> <p>To ensure that large-scale renewable energy projects are compatible and not in conflict with existing land use and zoning designations, and that any such facilities do not result in conflicts with adjacent land uses, the City shall develop a set of siting guidelines for such facilities <u>prior to permitting any large-scale renewable energy projects</u>. The guidelines shall avoid land use conflicts and contain specific provisions for appropriate siting of large renewable energy facilities to include all of the following <u>at a minimum</u>:</p> <ul style="list-style-type: none"> • A definition of the type and scale of facility that is subject to the siting guidelines. This list may be revised from time to time, as new technologies emerge and evolve. • A matrix table that shows, for each type of facility, the appropriate land use and zoning designations, where siting of facilities would not be expected to cause a significant land use conflict. • Guidelines or best management practices for minimizing conflicts with neighboring land uses. These would include, but not be limited to, required and recommended siting criteria; general design guidelines (such as property line setbacks); minimizing construction and operational noise (such as adherence to Noise Ordinance standards and General Plan compatibility standards); minimizing electromagnetic frequency (EMF) exposure; and minimizing visual prominence (for example, by avoiding siting of facilities on ridgelines and other prominent topographical features, or by providing vegetative screens); <u>and minimizing lighting and glare effects (such as adherence to the City's Outdoor Lighting Regulations)</u>. • The requirement that a facility demonstrate that there are no sensitive biological resources present on-site that would be impacted by development of the proposed large-scale renewable energy facility, or demonstrate compliance with the MSCP Subarea Plan Section 1.4.3, Land Use Adjacency Guidelines, and with the City's ESL Regulations. • The requirement that a facility demonstrate that there are no historical resources present on-site that would be impacted by development of the proposed large-scale renewable energy facility, or demonstrate compliance with Mitigation Framework HIST-1. • A checklist to determine whether, even with adherence to the guidelines provided, a facility may still result in a land use conflict. 	Less than Significant
Issue 2: Would implementation of the CAP conflict with the environmental goals, objectives, or recommendations of the General Plan or affected community plans? (Less than Significant)	None required.	Not applicable
Issue 3: Would implementation of the CAP result in a conflict with an adopted environmental plan or other approved local, regional or State habitat conservation plan? (Less than Significant)	None required.	Not applicable

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact and Level of Significance	Mitigation Framework	Level of Significance after Mitigation
B. Visual and Neighborhood Resources		
Issue 1: Would implementation of the CAP affect the visual quality of the planning area, particularly with respect to views from public viewing areas, vistas, or open spaces? (Significant)	Implement Mitigation Measure LU-1	Significant and Unavoidable
Issue 2: Would implementation of the CAP introduce incompatible uses with surrounding development in terms of bulk, scale, materials, or style that would result in adverse visual impacts? (Significant)	Implement Mitigation Measure LU-1	Significant and Unavoidable
Issue 3: Would implementation of the CAP create substantial light or glare which would adversely affect daytime or nighttime views in the area? (Less than Significant)	None required.	Not applicable
C. Air Quality		
Issue 1: Would implementation of the CAP affect the ability of the Regional Air Quality Strategy (RAQS) to meet the federal and state clean air standards, or conflict with implementation of other regional air quality plans? (Less than Significant)	None required.	Not applicable
Issue 2: Would implementation of the CAP result in air emissions that would substantially deteriorate ambient air quality, including the exposure of sensitive receptors to substantial pollutant concentrations? (Significant)	<p>Mitigation Measure AIR-1: Best Available Control Measures for Construction Emissions</p> <p>This mitigation measure incorporates the Mitigation Framework for construction-related air impacts contained in the General Plan PEIR, which states the following: For projects that may exceed daily construction emissions established by the City of San Diego, Best Available Control Measures will be incorporated to reduce construction emissions to below daily emission standards established by the City of San Diego. Project proponents must prepare and implement a Construction Management Plan which includes but is not limited to Best Available Control Measures. Appropriate control measures will be determined on a project-by-project basis, and are specific to the pollutant for which the daily threshold may be exceeded. Control measures may include:</p> <ul style="list-style-type: none"> • Minimizing simultaneous operation of multiple construction equipment units; • Use of low pollutant emitting equipment; • Use of catalytic reduction for gasoline-powered equipment; • Watering the construction area to minimize fugitive dust; and • Minimizing idling time by construction vehicles. <p>Mitigation Measure AIR-2: Reduce Emissions from Expanded Recycling and Organics Collection Programs</p> <p>To ensure that increased VMT resulting from implementation of CAP Action 4.1 does not result in significant air emissions, collection vehicles shall be converted to alternative fuels, such as natural gas, during roll-out of the expanded program, such that combined emissions fall below the significance threshold for daily and annual NOx emissions. This will be</p>	Significant and Unavoidable

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact and Level of Significance	Mitigation Framework	Level of Significance after Mitigation
C. Air Quality (cont.)		
Issue 2 (cont.)	confirmed using generally accepted air emissions modeling, such as the CalEEMod model. In addition, to the extent that new programs increase VMT for long-haul vehicles, these vehicles shall also be converted to alternative fuels, such as natural gas, such that any increase falls below the significance threshold for daily and annual NOx emissions.	
D. Greenhouse Gases		
Issue 1: Would implementation of the CAP generate GHG emissions, either directly or indirectly, that may have a cumulatively significant impact on the environment? (Less than Significant)	None required.	Not applicable
Issue 2: Would implementation of the CAP conflict with the GHG reduction targets and measures identified in Governor's Executive Order S-3-05, Executive Order B-30-15, and CARB's AB 32 Scoping Plan? (Less than Significant)	None required.	Not applicable
E. Historical Resources		
Issue 1: Would implementation of the CAP cause a substantial adverse change in the significance of a historical resource, as defined in Section 15064.5, or have other physical or aesthetic effects to a prehistoric or historic building, structure, object or site? (Significant)	<p>Mitigation Measure HIST-1: Archaeological Resources</p> <p>Prior to issuance of any permit for a future development project that could directly affect an archaeological resource, the City shall require the following steps be taken to determine: (1) the presence of archaeological resources and (2) the appropriate mitigation for any significant resources which may be impacted by a development activity. Sites may include, but are not limited to, residential and commercial properties, privies, trash pits, building foundations, and industrial features representing the contributions of people from diverse socio-economic and ethnic backgrounds. Sites may also include resources associated with prehistoric Native American activities.</p> <p>Initial Determination</p> <p>The likelihood for the project site to contain historical resources shall be determined by reviewing site photographs and existing historic information (e.g. Archaeological Sensitivity Maps, the Archaeological Map Book, and the City's "Historical Inventory of Important Architects, Structures, and People in San Diego") and conducting a site visit. If there is any evidence that the site contains archaeological resources, then a historic evaluation consistent with the City's Historical Resources Guidelines (City Guidelines) would be required. All individuals conducting any phase of the archaeological evaluation program must meet professional qualifications in accordance with the City Guidelines.</p> <p>Step 1: Based on the results of the Initial Determination, if there is evidence that the site contains historical resources, preparation of a historic evaluation is required. The evaluation report would generally include background research, field survey, archeological testing and analysis. Before actual field reconnaissance would occur, background research is required</p>	Significant and Unavoidable

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact and Level of Significance	Mitigation Framework	Level of Significance after Mitigation
E. Historical Resources (cont.)		
Issue 1 (cont.)	<p>which includes a record search at the SCIC at San Diego State University and the San Diego Museum of Man. A review of the Sacred Lands File maintained by the NAHC must also be conducted at this time. Information about existing archaeological collections shall also be obtained from the San Diego Archaeology Center and any tribal repositories or museums.</p> <p>In addition to the record searches mentioned above, background information may include, but is not limited to: examining primary sources of historical information (e.g., deeds and wills), secondary sources (e.g., local histories and genealogies), Sanborn Fire Maps, and historic cartographic and aerial photograph sources; reviewing previous archeological research in similar areas, models that predict site distribution, and archeological, architectural, and historical site inventory files; and conducting informant interviews. The results of the background information shall be included in the evaluation report.</p> <p>Once the background research is complete, a field reconnaissance must be conducted by individuals whose qualifications meet the standards outlined in the City Guidelines. Consultants are encouraged to employ innovative survey techniques when conducting enhanced reconnaissance, including, but not limited to, remote sensing, ground penetrating radar, and other soil resistivity techniques as determined on a case-by-case basis. Native American participation is required for field surveys when there is likelihood that the project site contains prehistoric archaeological resources or traditional cultural properties. If through background research and field surveys historical resources are identified, then an evaluation of significance must be performed by a qualified archaeologist. ¹</p> <p>Step 2: Once a historical resource has been identified, a significance determination must be made. Tribal representatives and/or Native American monitors will be involved in making recommendations regarding the significance of prehistoric archaeological sites during this phase of the process. The testing program may require reevaluation of the proposed project in consultation with the Native American representative which could result in a combination of project redesign to avoid and/or preserve significant resources as well as mitigation in the form of data recovery and monitoring (as recommended by the qualified archaeologist and Native American representative). An archaeological testing program will be required which includes evaluating the horizontal and vertical dimensions of a site, the chronological placement, site function, artifact/ecofact density and variability, presence/absence of subsurface features, and research potential. A thorough discussion of testing methodologies, including surface and subsurface investigations, can be found in the City Guidelines.</p> <p>The results from the testing program shall be evaluated against the Significance Thresholds found in the City Guidelines. If significant historical resources are identified within the Area of Potential Effect, the site may be eligible for local designation. At this time, the final testing report must be submitted to Historical Resources Board staff for eligibility determination and possible designation. An agreement on the appropriate form of mitigation is required prior to distribution of a draft environmental document. If no significant resources are found, and site conditions are such that there is no potential for further discoveries, then no further action is</p>	

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact and Level of Significance	Mitigation Framework	Level of Significance after Mitigation
E. Historical Resources (cont.)		
Issue 1 (cont.)	<p>required. Resources found to be non-significant as a result of a survey and/or assessment will require no further work beyond documentation of the resources on the appropriate Department of Parks and Recreation (DPR) site forms and inclusion of results in the survey and/or assessment report. If no significant resources are found, but results of the initial evaluation and testing phase indicates there is still a potential for resources to be present in portions of the property that could not be tested, then mitigation monitoring is required.</p> <p>Step 3: Preferred mitigation for historical resources is to avoid the resource through project redesign. If the resource cannot be entirely avoided, all prudent and feasible measures to minimize harm shall be taken. For archaeological resources where preservation is not an option, a Research Design and Data Recovery Program is required, which includes a Collections Management Plan for review and approval. The data recovery program shall be based on a written research design and is subject to the provisions as outlined in CEQA, Section 21083.2. The data recovery program must be reviewed and approved by the City's Environmental Analyst prior to draft CEQA document distribution. Archaeological monitoring may be required during building demolition and/or construction grading when significant resources are known or suspected to be present on a site, but cannot be recovered prior to grading due to obstructions such as, but not limited to, existing development or dense vegetation.</p> <p>A Native American observer must be retained for all subsurface investigations, including geotechnical testing and other ground-disturbing activities, whenever a Native American Traditional Cultural Property or any archaeological site located on City property or within the Area of Potential Effect of a City project would be impacted. In the event that human remains are encountered during data recovery and/or a monitoring program, the provisions of Public Resources Code Section 5097 must be followed. In the event that human remains are discovered during project grading, work shall halt in that area and the procedures set forth in the California Public Resources Code (Section 50987.98) and State Health and Safety Code (Section 7050.5), and in the federal, state, and local regulations described above shall be undertaken. These provisions are outlined in the Mitigation Monitoring and Reporting Program (MMRP) included in the environmental document. The Native American monitor shall be consulted during the preparation of the written report, at which time they may express concerns about the treatment of sensitive resources. If the Native American community requests participation of an observer for subsurface investigations on private property, the request shall be honored.</p> <p>Step 4: Archaeological Resource Management reports shall be prepared by qualified professionals as determined by the criteria set forth in Appendix B of the City Guidelines. The discipline shall be tailored to the resource under evaluation. In cases involving complex resources, such as traditional cultural properties, rural landscape districts, sites involving a combination of prehistoric and historic archaeology, or historic districts, a team of experts will be necessary for a complete evaluation.</p>	

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact and Level of Significance	Mitigation Framework	Level of Significance after Mitigation
E. Historical Resources (cont.)		
Issue 1 (cont.)	<p>Specific types of historical resource reports are required to document the methods (see Section III of the City Guidelines) used to determine the presence or absence of historical resources; to identify the potential impacts from proposed development and evaluate the significance of any identified historical resources; to document the appropriate curation of archaeological collections (e.g. collected materials and the associated records); in the case of potentially significant impacts to historical resources, to recommend appropriate mitigation measures that would reduce the impacts to below a level of significance; and to document the results of mitigation and monitoring programs, if required.</p> <p>Archaeological Resource Management reports shall be prepared in conformance with the California Office of Historic Preservation "Archaeological Resource Management Reports: Recommended Contents and Format" (see Appendix C of the City Guidelines), which will be used by Environmental Analysis Section staff in the review of archaeological resource reports. Consultants must ensure that archaeological resource reports are prepared consistent with this checklist. This requirement will standardize the content and format of all archaeological technical reports submitted to the City. A confidential appendix must be submitted (under separate cover) along with historical resources reports for archaeological sites and traditional cultural properties containing the confidential resource maps and records search information gathered during the background study. In addition, a Collections Management Plan shall be prepared for projects which result in a substantial collection of artifacts and must address the management and research goals of the project and the types of materials to be collected and curated based on a sampling strategy that is acceptable to the City. Appendix D (Historical Resources Report Form) may be used when no archaeological resources were identified within the project boundaries.</p> <p>Step 5: For Archaeological Resources: All cultural materials, including original maps, field notes, non-burial related artifacts, catalog information, and final reports recovered during public and/or private development projects must be permanently curated with an appropriate institution, one which has the proper facilities and staffing for insuring research access to the collections consistent with state and federal standards. In the event that a prehistoric and/or historic deposit is encountered during construction monitoring, a Collections Management Plan would be required in accordance with the project MMRP. The disposition of human remains and burial related artifacts that cannot be avoided or are inadvertently discovered is governed by state (i.e., Assembly Bill 2641 and California Native American Graves Protection and Repatriation Act of 2001) and federal (i.e., Native American Graves Protection and Repatriation Act) law, and must be treated in a dignified and culturally appropriate manner with respect for the deceased individual(s) and their descendants. Any human bones and associated grave goods of Native American origin shall be turned over to the appropriate Native American group for repatriation.</p> <p>Arrangements for long-term curation must be established between the applicant/property owner and the consultant prior to the initiation of the field reconnaissance, and must be included in the archaeological survey, testing, and/or data recovery report submitted to the</p>	

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact and Level of Significance	Mitigation Framework	Level of Significance after Mitigation
E. Historical Resources (cont.)		
Issue 1 (cont.)	City for review and approval. Curation must be accomplished in accordance with the California State Historic Resources Commission's Guidelines for the Curation of Archaeological Collection (dated May 7, 1993) and, if federal funding is involved, 36 Code of Federal Regulations 79 of the Federal Register. Additional information regarding curation is provided in Section II of the City Guidelines.	
F. Transportation and Circulation		
Issue 1: Would implementation of the CAP result in a substantial impact upon existing or planned transportation systems?	None required.	Not applicable
Issue 2: Would implementation of the CAP create substantial alterations to present circulation movements including effects on existing public access points and/or resulting from anticipated changes in transportation modes?	Mitigation Measure TR-1: The Roundabouts Master Plan shall include a monitoring and adaptive management program to evaluate, and if necessary, to correct, pedestrian safety issues at operating roundabouts.	Significant and Unavoidable
Issue 3: Would implementation of the CAP conflict with the adopted policies, plans or programs supporting alternative transportation modes (e.g., bus turnouts, trolley extensions, bicycle lanes, bicycle racks, etc.)?	None required.	Not applicable
G. Utilities		
Issue 1: Would implementation of the CAP result in a need for new utility systems, or require substantial alterations to existing infrastructure? (Less than Significant)	None required.	Not applicable
H. Water Supply		
Issue 1: Would implementation of the CAP result in the excessive use of water? (Less than Significant)	Mitigation Measure WS-1: Water Supply Assessment. In order to ensure that large-scale renewable energy projects do not use excessive amounts of water, a Water Supply Assessment (WSA) shall be submitted for review as part of the subsequent environmental review process. The WSA shall demonstrate that the proposed project would not demand an amount of water greater than the amount required by a 500 dwelling unit project.	Less than Significant

CHAPTER 1

Introduction and Environmental Setting

A. Introduction

This Draft Program Environmental Impact Report (PEIR) has been prepared for the City of San Diego Climate Action Plan (CAP) (hereafter referred to as the “proposed Project” or “Project”). This section describes: (1) the purpose and legal authority of the PEIR; (2) the scope and content of the PEIR; (3) lead, responsible, and trustee agencies; and (4) the environmental review process required under the California Environmental Quality Act (CEQA).

Purpose and Legal Authority

Pursuant to Section 15060(d) of the California Environmental Quality Act (CEQA), the Environmental and Resource Analysis (E&RA) Division of the City of San Diego Planning Department has determined that the proposed Project may have significant effects on the environment, and the preparation of an Environmental Impact Report (EIR) is required. Approval of the proposed Project requires discretionary actions to be taken by the City of San Diego (City). Therefore, it is subject to the requirements of CEQA. Pursuant to the provisions of CEQA, the City, as lead agency, has determined that the proposed CAP could result in one or more significant effects, and that an EIR must be prepared. In accordance with CEQA *Guidelines* Section 15121, the purpose of this PEIR is to serve as an informational document that:

...will inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.

Environmental Review Context

The purpose of this PEIR is to satisfy CEQA requirements by addressing the environmental effects of the proposed CAP. The lead agency has determined that a Program EIR is the appropriate environmental document for this Project because the CAP can be characterized as one large program that governs the interconnected and continued climate-related planning of the entire City.

The CAP is intended to more fully address projected communitywide greenhouse gas (GHG) emissions and provide a plan for reducing such emissions beyond what was previously accomplished with the City’s General Plan and General Plan PEIR. Accordingly, this document is intended as a PEIR, addressing the environmental effects of implementing the proposed Project.

According to the CEQA *Guidelines* (Section 15168(a)), a public agency may prepare a PEIR that can be characterized as one large project or a series of actions that are linked geographically; logical parts of a chain of contemplated events; rules, regulations, or plans that govern the conduct of a continuing program; or individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects that can be mitigated in similar ways.

Under CEQA, a PEIR can function as a first-tier environmental document that assesses and documents the broad environmental impacts of a program with the understanding that a more detailed site-specific review may be required to assess future projects implemented under the program, pursuant to CEQA *Guidelines* Section 15168. The analysis contained in this EIR may also be used as a reference for subsequent environmental review of projects facilitated by implementation of the strategies and actions in the CAP.

The series of actions analyzed in this PEIR includes all GHG reduction strategies and actions contained in the CAP. While the PEIR will identify potential impacts that would result from Project implementation, the analysis is not detailed to the level of site specificity. The PEIR will identify a range of potential impacts resulting from implementation of the CAP and will identify mitigation measures that will reduce identified potentially significant effects, as needed.

Section 15150(a) of the CEQA *Guidelines* states that an EIR:

...may incorporate by reference all or portions of another document which is a matter of public record or is generally available to the public. Where all or part of another document is incorporated by reference, the incorporated language shall be considered to be set forth in full as part of the text of the EIR...

CAP Actions 3.1 and 3.6, which call for implementation of the General Plan Mobility Element and City of Villages strategy in transit priority areas as well as implementation of Transit-Oriented Development within Transit Priority Areas were addressed in the previous environmental review contained in the City of San Diego General Plan Program EIR (State Clearinghouse No. 2006091032). Therefore, this PEIR incorporates by reference the General Plan PEIR.

The level of specificity of an EIR is determined by the nature of the project and the rule of reason. As such, the lead agency has outlined in the Notice of Preparation (NOP) the key environmental issues that will be the focus of this PEIR analysis; these are: land use, visual effects and neighborhood character, air quality, greenhouse gases, historic resources, transportation and circulation, utilities, and water supply.

Purpose and Function of this PEIR

This PEIR has been prepared to evaluate the anticipated environmental effects of the proposed Project in conformance with the provisions of CEQA and CEQA *Guidelines*, as amended. The City of San Diego is lead agency under CEQA, and, as such, is the public agency that has the principal responsibility for carrying out or approving the Project, the CAP. This PEIR was prepared in accordance with CEQA *Guidelines* Section 15151, which defines the standards for EIR adequacy:

An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a Project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

As stated in the CEQA Guidelines, an EIR is an “informational document” intended to inform public agency decision makers and the public of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. Although this PEIR does not control the ultimate decision on the proposed Project, the City is required by CEQA to consider the information provided in this PEIR. The City will use the PEIR, along with other information and public processes, to determine whether to approve, modify, or disapprove the proposed Project, and to specify any applicable environmental or other conditions of approval as part of Project approval.

The purpose of this PEIR is to provide the City, public agencies, and the public in general with detailed information about the environmental effects of implementing the proposed Project, to examine and institute methods of mitigating any adverse environmental impacts should the Project be approved, and to consider alternatives to the Project as proposed. CEQA provides that public agencies should not approve projects until all feasible means available have been employed to avoid or substantially lessen the significant environmental effects of such projects. “Feasible” means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.

Scope of the Environmental Analysis

The purpose of the analyses contained in this PEIR is to measure the potential environmental impacts that are likely to result from implementation of the policies and reduction strategies contained in the CAP. The proposed CAP is a policy document that provides direction for how GHG emissions should be reduced within the City, and the analysis identifies the potential for implementation of those policies to cause physical changes to the environment.

Intended Uses of the PEIR

Future Qualified Greenhouse Gas Reduction Plan CAP Provisions

CEQA Section 15183.5(b)(1)(A)-(F) provides that a lead agency may determine that a project’s incremental contribution to a cumulative effect is not cumulatively considerable if the project complies with the requirements in a previously adopted plan or mitigation program. That plan for the reduction of GHG emissions should:

- A. Quantify GHG emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area;

- B. Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable;
- C. Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area;
- D. Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;
- E. Establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels; and
- F. Be adopted in a public process following environmental review.

It is anticipated that with future implementing actions, the City's CAP would serve as a qualified greenhouse gas reduction plan under CEQA Guidelines section 15183.5, and this EIR would be used in the cumulative impacts analysis for later projects, meets the above requirements through the first target year 2020. The City intends to use this PEIR, upon adoption of the CAP, to analyze and mitigate the significant effects of GHG emissions at a programmatic level to reduce GHG emissions, whereby individual projects preparing project-specific environmental documents, if eligible, may tier from and/or incorporate by reference the CAP's programmatic review of GHG impacts in their cumulative impacts analysis.

~~The CAP includes a Climate Action Plan Consistency Checklist (CAP Consistency Checklist) that would be used for CEQA tiering to determine whether a project complies with the CAP and may therefore tier from this PEIR for cumulative GHG emissions impacts. The City may modify the CAP Consistency Checklist in the event of changes in the law, scientific discovery, new factual data that alters the common application of the measures or for any other reason deemed necessary by the City. Individual projects that comply with the CAP may still be required to undergo additional environmental review if there is substantial evidence that the particular project may have cumulatively considerable significant impacts (14CCR 15183.5).~~

Draft PEIR

Notice of Preparation

On February 18, 2015, the City sent a Notice of Preparation (NOP) to responsible, trustee, and federal agencies, as well as to organizations, and individuals potentially interested in the CAP. The NOP is included as **Appendix A** of this Draft PEIR. The NOP requested that agencies with regulatory authority over any aspect of the CAP describe that authority and identify the relevant environmental issues that should be addressed in the PEIR. Interested members of the public were also invited to comment. Responses to the NOP are also included in Appendix A.

A public scoping meeting on the PEIR was held on March 2, 2015. Meeting minutes, which identify the commenters and their concerns, are included in Appendix A.

Draft PEIR

This document constitutes the Draft PEIR. The Draft PEIR contains a description of the CAP, description of the environmental setting, identification of significant environmental impacts and mitigation measures for impacts found to be significant, a brief description of impacts found not to be significant, and an analysis of project alternatives. Upon completion of the Draft PEIR, the City filed a Notice of Completion (NOC) with the Governor's Office of Planning and Research to begin the public review period (CEQA Section 21161).

Public Notice and Public Review

Concurrent with the NOC, the City has provided public notice of the availability (NOA) of the Draft PEIR for public review, and is inviting comment from the general public, agencies, organizations, and other interested parties. The public review period will be sixty (60) days beginning July 31, 2015 and ending on September 29, 2015.

All comments or questions regarding the Draft PEIR should be addressed to:

Rebecca Malone
Associate Planner
City of San Diego Planning Department
1222 First Avenue, MS 501
San Diego, CA 92101

Or via email to DSDEAS@sanidiego.gov

Final EIR and Project Approval

Following the public review period, a Final PEIR will be prepared. The Final PEIR will respond to comments on environmental issues that are received during the public review period.

The Final PEIR will be reviewed by the City Council, who will consider the Final PEIR and determine whether it is in compliance with CEQA, and then consider whether to adopt CEQA findings, adopt a statement of overriding considerations, adopt the mitigation monitoring and reporting program (MMRP), and consider whether to approve the proposed Climate Action Plan.

When a public agency approves a project for which an EIR has been certified, which identifies one or more significant environmental effects, CEQA requires that the agency make one or more written findings for each of those significant effects accompanied by a brief explanation of the rationale for each finding (CEQA *Guidelines* Section 15091). The lead agency must find either that the significant impact has been mitigated, that mitigation is the responsibility of another agency that can and should adopt it, or that mitigation is infeasible. Because significant environmental effects have been identified in this EIR, findings will be required for the proposed Project.

At the time of Project approval, the City Council will also consider whether to adopt a statement of overriding considerations. A statement of overriding considerations identifies the reasons why the benefits of the proposed project outweigh the significant adverse environmental impacts of the Project, if there are impacts that cannot be avoided or substantially lessened (CEQA *Guidelines* Section 15093).

CEQA requires that when a public agency makes findings based on an EIR, the public agency must also adopt a MMRP for those measures that it has adopted or made a condition of Project approval in order to mitigate or avoid potentially significant effects on the environment. The City Council would adopt a MMRP to ensure compliance with required mitigation measures during Project implementation (CEQA *Guidelines* Section 15097). The MMRP would be prepared and available for review at the time of the Final PEIR.

Upon considering the Final PEIR and CEQA findings, the Council may then take action to approve, revise, or reject the proposed Climate Action Plan.

Range of Alternatives

CEQA requires that an EIR discuss a reasonable range of potentially feasible alternatives to the proposed project. This Draft PEIR describes and analyzes a reasonable range of alternatives, including a “No Project” alternative as required under CEQA (CEQA *Guidelines* Section 15126.6[e]); compares the environmental effects of each alternative with the effects of the proposed project; and addresses the relationship of each alternative to the project objectives (see Chapter 5). The final determinations of the lead agency concerning the feasibility, acceptance, or rejection of the alternatives considered in this PEIR would be addressed in the findings when the City Council considers approval of the proposed project, as required by CEQA.

Organization of the Draft PEIR

Executive Summary provides a summary of the CEQA legislation relevant to the Project, generally outlines the PEIR process, provides a brief Project description, and highlights important components of the environmental analysis, including a table listing the Project impacts and mitigation measures.

Introduction and Environmental Setting (Chapter 1) defines the purpose, scope and legislative authority of the PEIR, requirements of CEQA, and other pertinent environmental rules and regulations. This section also describes the PEIR process, structure, and required contents, and the PEIR’s relationship to the City’s General Plan PEIR and other environmental documents. The intended uses of the PEIR in streamlining the cumulative effects analysis for subsequent projects consistent with CEQA, with future implementing actions, are also described. This section also generally describes the environmental setting of the Project area, including any key features.

Project Description (Chapter 2) provides a description of the CAP and its contents.

Environmental Impacts and Mitigation Measures (Chapter 3) contains a description of the environmental setting (existing physical environmental conditions), the regulatory setting, and the environmental impacts that could result from the proposed Project. It includes the thresholds of significance used to determine the significance of adverse environmental effects. This chapter also identifies mitigation measures which would avoid or substantially lessen these significant adverse impacts. The impact discussions disclose the significance of the each impact both with and without implementation of mitigation measures.

History of Project Changes (Chapter 4) provides a brief history of the development of the CAP and lists any changes made to the CAP since the publishing of the Notice of Preparation.

Growth Inducement (Chapter 5) presents the potential short-term and long-term growth-inducing effects that could result from implementation of the proposed Project.

Cumulative Impacts (Chapter 6) presents the analysis of cumulative impacts.

Other CEQA Considerations (Chapter 7) presents significant irreversible changes, significant and unavoidable environmental impacts, and effects found to be less than significant.

Alternatives (Chapter 8) evaluates a range of reasonable alternatives to the proposed Project and identifies an environmentally superior alternative, consistent with the requirements of CEQA. The alternatives analysis evaluates each alternative's ability to meet the Project objectives and its ability to reduce environmental impacts.

Certification and Report Authors (Chapter 9) identifies the authors of the PEIR, and the persons and organizations consulted during preparation of the PEIR.

References (Chapter 10) lists the documents and other references consulted during preparation of the PEIR.

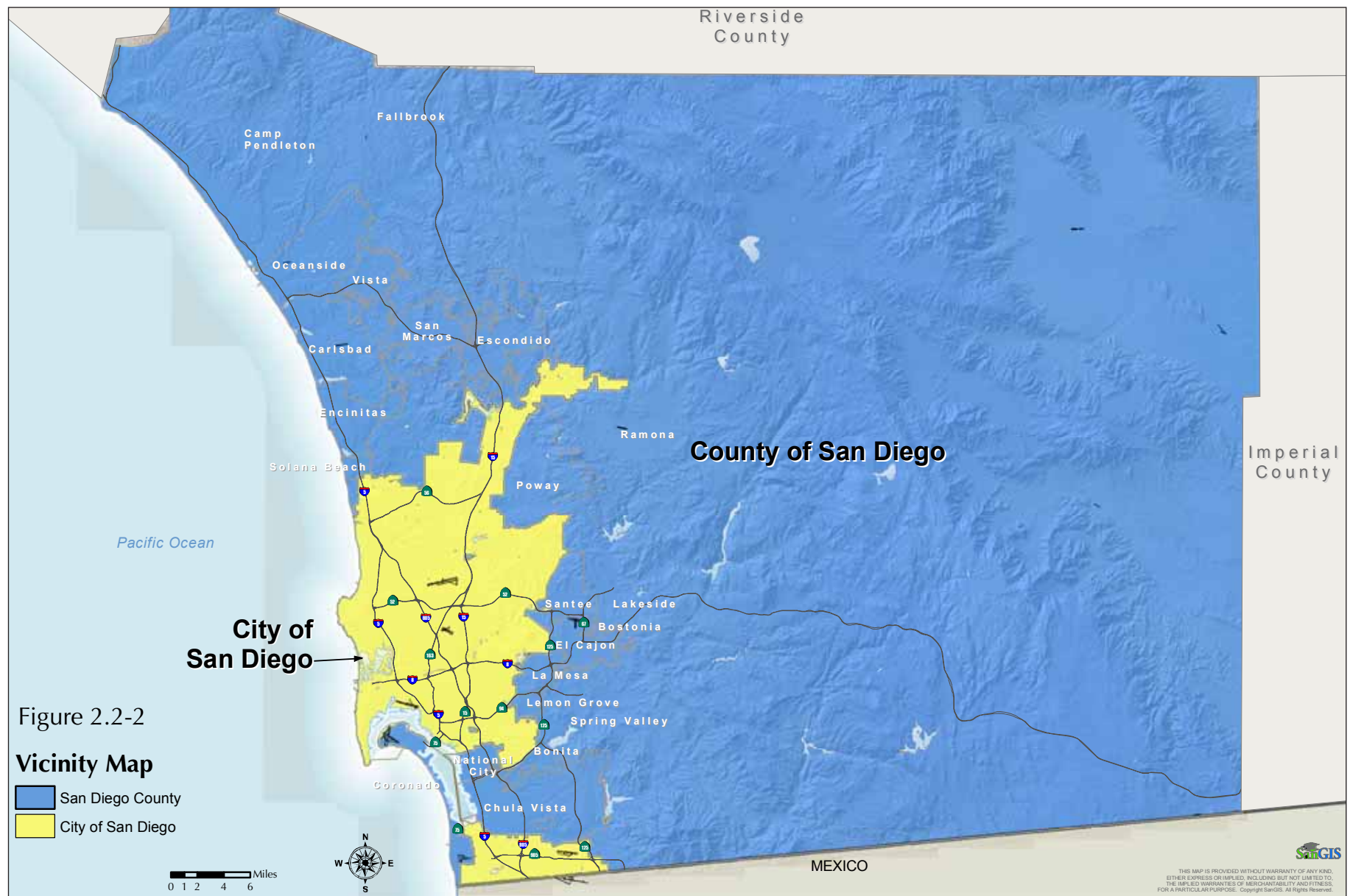
Mitigation, Monitoring, and Reporting Program (Chapter 11) describes the procedures, actions, schedule, and responsibility for implementing the mitigation measures in the PEIR.

Appendix A contains the NOP, comment letters received on the NOP, comments from the scoping hearing, as well as supporting documents and technical information for the impact analyses.

B. Environmental Setting

Regional Location and Access

The City of San Diego is located within San Diego County in the southwestern corner of California (**Figure 1-1**). San Diego County is bordered by the Pacific Ocean on the west, Riverside County to the north, Imperial County to the east, and Orange County at the northwest corner. Like the County, the City's westernmost border is formed by the Pacific Ocean and the southernmost border is formed by the Republic of Mexico and the City of Tijuana. Across the City's northwest border are the coastal communities of the City of Del Mar and the City of Solana Beach, with the northeastern border formed by the Cities of Escondido, Poway, and unincorporated areas of the County. Along its eastern boundary the City is adjacent to the Cities of Santee, La Mesa, Lemon Grove, and additional unincorporated areas. The City's irregular boundary is formed by National City, located just south of the northern portion of San Diego, Chula Vista located just north of San Ysidro, the City's southernmost community, and Imperial Beach to the west. In addition, the City of Coronado lies west of San Diego Bay, which is connected to the City by the San Diego Coronado Bay Bridge.



SOURCE: City of San Diego Draft General Plan Final PEIR, September 2007

San Diego CAP . 140651
Figure 1-1
Planning Area Vicinity

San Diego is at the nexus of three interstate highways that provide connectivity to surrounding regions and neighboring states. Interstate 5 (I-5) runs north to south along San Diego's west coast, connecting along the coast towards the greater Los Angeles area and then running northeast through California's Central Valley to Portland, Oregon, and then Seattle, Washington before it reaches the Canadian Border. To the south, I-5 provides the State's primary connection to the Republic of Mexico at the Tijuana border. Interstate 15 (I-15) originates from I-5 near San Diego Bay, just south of Downtown, running north towards the San Bernardino area and then cutting east through the Mojave Desert to the City of Las Vegas, Nevada. Interstate 805 (I-805) provides additional north to south connectivity, branching off from I-5 in the Torrey Hills Community area to cut through the center of the City and then rejoin the I-5 roughly one mile before the border crossing with Mexico. Interstate 8 (I-8) originates near the coastal outlet of the San Diego River and provides east to west connectivity through the City and to unincorporated areas of the County in the east before crossing the state border to Arizona, where it connects to Interstate 10 (I-10) at a point midway between Phoenix and Tucson.

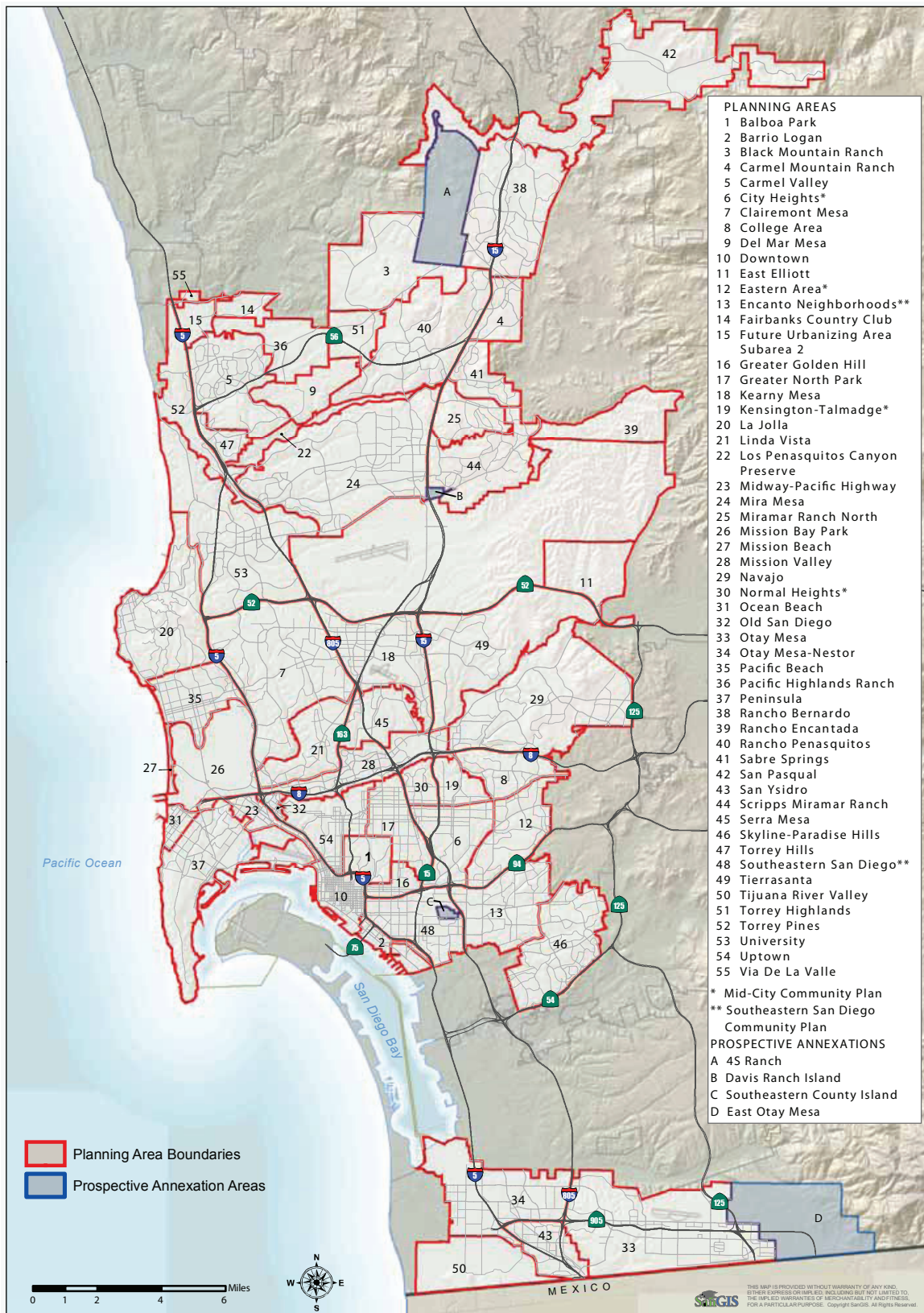
Local connectivity is provided by a series of state routes that connect between the primary interstate highways. State Route 56 (SR-56) runs east to west between I-5 and I-15 in the northern part of the City. State Route 52 (SR-52) runs east to west starting in the Claremont Mesa community area then along the southern border of the East Elliot community area military facilities to connect to the City of Santee in the east. Connectivity to Downtown San Diego is provided by State Route 94 (SR-94) in the east and State Route 163 (SR-163) to the north. State Route 905 (SR-905) provides east to west connectivity through the southernmost community areas of San Diego.

Planning Area

The planning area for the CAP is the General Plan planning area, which encompasses all land within the city limits and prospective annexation areas, as shown in **Figure 1-2**. The City includes approximately 332 square miles of land separated into 55 community planning areas. The region's topography ranges from beaches along the west to mountains and desert in the east, largely defined by mesa tops intersected by canyon areas.

The major east-to-west canyons form distinct natural and physical barriers, thereby creating unique communities within the greater development scheme. The topography is also defined by several major north-to-south drainages, which include: the San Dieguito River, Los Peñasquitos Canyon, Carroll Canyon, Rose Canyon, San Diego River, Las Chollas Creek, Sweetwater River, Otay River and the westernmost mouth of the Tijuana River. Land surrounding several of the drainages is designated as open space in an effort to minimize future development in the land between each community. This includes the San Dieguito River Valley, Los Peñasquitos Canyon, San Clemente Canyon, and the Otay River Valley.

Other significant features of San Diego's topography include its three marine terraces, which step up the coastal plain west to east towards the inland foothills. Closest to the coast is the La Jolla Terrace, beyond which is the Linda Vista Terrace, the largest of the terraces that contains the "mesa" communities: Mira Mesa, Kearny Mesa, Serra Mesa, Otay Mesa, and Clairemont Mesa. The third terrace, the Poway Terrace, has eroded away and is no longer a distinct landform (City of San Diego, 2007).



SOURCE: City of San Diego Draft General Plan Final PEIR, September 2007

San Diego CAP . 140651

Figure 1-2
Planning Area

Energy Resources

Residents and businesses in the City of San Diego are supplied electricity and natural gas through the San Diego Gas & Electric Company (SDG&E). SDG&E purchases raw energy supplies from various suppliers located outside of the city and transports those energy sources to local plants for processing. SDG&E purchases electricity from the Otay Mesa Energy Center, owned by Calpine, and SDG&E owns and operates the Palomar Energy Center in Escondido. SDG&E produces electricity at the Cabrillo (Encina) and South Bay Power Plants, as well other smaller power plants in the San Diego area. Once the energy is processed, it is sent to customers via SDG&E's system of transmission lines. In 2010, the baseline year of the CAP, SDG&E derived 11 percent of its power from renewable resources including: wind power, solar, small hydroelectric, geothermal, and biomass and waste digestion. SDG&E derived 60 percent of its power from natural gas sources, with nuclear energy providing 16 percent, and coal power providing four percent. The remaining nine percent was derived from untraceable electricity transactions. In June 2013, the San Onofre Nuclear Generating Station ceased operations; and thus, SDG&E no longer has a nuclear energy source (Southern California Edison, 2015).

Planning Context

Regional

SANDAG Regional Transportation Plan and Sustainable Communities Strategy

The San Diego Association of Governments (SANDAG) was the first Metropolitan Planning Organization (MPO) in California to produce a Sustainable Communities Strategy (SCS) as required by SB 375. Passed in 2008, SB 375 requires each MPO in California to prepare a SCS as a part of its Regional Transportation Plan (RTP). The SCS must demonstrate how regional GHG reduction targets (related to vehicle miles traveled [VMT] from cars and light trucks) would be met through land use patterns, transportation infrastructure investments, and other measures.

According to SANDAG, the GHG targets for the San Diego region call for a seven percent per capita reduction in transportation emissions (from passenger vehicles) by 2020 and a 13 percent per capita reduction by 2035. As part of the action taken to approve the 2050 RTP and its SCS, SANDAG will implement the following early actions:

- Evaluate alternative land use scenarios as part of the Regional Comprehensive Plan (RCP) update to attempt to address the so-called “backsliding” of GHG levels between 2035-2050;
- Develop an early action program for projects included in the Regional Bicycle Plan;
- Plan for the broader Active Transportation program, including Safe Routes to School and Safe Routes to Transit. The Safe Routes to School Capacity Building and Planning Grant Program has awarded six grants of approximately \$50,000 each, for a total of \$279,283, to support planning for comprehensive safe routes to school;
- Implement an action to develop a regional transit-oriented development policy in the 2050 RTP SCS to promote and incentivize sustainable development;

- Continue to make enhancements to the travel demand models; the activity-based models currently under development will be “open source” and available for the next RTP update (SANDAG 2013).

San Diego Unified Port District

As an environmental steward of San Diego Bay, the Port of San Diego (Port) has adopted a Climate Action Plan providing a long-term strategy to reduce GHG emissions from Port tidelands. The Port’s Climate Action Plan will focus on a variety of actions including transportation, energy efficiency, and alternative energy generation, and will be critical for future planning and development within the Port’s jurisdiction. The Port has also begun efforts to create a long-term vision for climate adaptation to ensure the tidelands are resilient to a changing climate, including rising sea levels (Port of San Diego, 2013).

San Diego County Water Authority

The City currently receives approximately 85 percent to 90 percent of its water from the San Diego County Water Authority (SDCWA), which obtains water principally from the Metropolitan Water District of Southern California and transferred water from the Imperial Irrigation District. The SDCWA Urban Water Management Plan (UWMP) serves as a long-range planning document for the City’s imported water supply in accordance with the Urban Water Management Act. SDCWA has completed a GHG inventory related to its operations, has developed a CAP, and is partnering with Scripps Institution of Oceanography to integrate impacts of climate change into its long range planning (SDCWA 2010). The City is actively pursuing options to diversify its water supply portfolio. The City Council adopts an UWMP every five years, as is required by the Urban Water Management Act.

Local

City of San Diego General Plan

The City of San Diego General Plan was adopted in 2008 as the framework for the City’s commitment to long-term conservation, sustainable growth, and resource management. It addresses GHG emission reductions through its City of Villages growth strategy and a wide range of inter-disciplinary policies. General Plan policies related to climate change are integrated throughout the document, and summarized in the Conservation Element in Table CE-1. Policy CE-A.2 in particular aims to “reduce the City’s carbon footprint” and to “develop and adopt new or amended regulations, programs and incentives as appropriate to implement the goals and policies set forth” related to climate change. Policy CE-A.13 aims to “regularly monitor, update, and implement the City’s Climate Protection Action Plan, to ensure, at a minimum, compliance with all applicable federal, state, and local laws.”

CHAPTER 2

Project Description

A. Project Purpose

Former Governor Arnold Schwarzenegger's Executive Order S-3-05 established the 2050 statewide greenhouse gas (GHG) reduction target of 80 percent below 1990 levels, expressing the intent of the State to address the issue of climate change through reducing GHGs. In 2015, Governor Edmund G. Brown, Jr.'s Executive Order B-30-15 established ~~the~~ an interim 2030 statewide GHG reduction target of 40 percent below 1990 levels in order to ensure California meets its target of reducing greenhouse gas emissions to 80 percent below 1990 levels by 2050.

In more recent years, California lawmakers have made clear that preventing or mitigating climate change is a key component of the state's sustainable future, and that local governments play a key role in reducing community-wide emissions with their control over local land use planning.

Following EO S-3-05, the California legislature passed Assembly Bill 32 (California Health and Safety Code Division 25.5, Sections 38500, et seq., or AB 32) in 2006, also known as the Global Warming Solutions Act. AB 32 requires the California Air Resources Board (CARB) to design and implement feasible and cost-effective emissions limits, regulations, and other measures, such that statewide GHG emissions are reduced to 1990 levels by 2020 (representing an approximately 15 to 25 percent reduction in current emissions). AB 32 anticipates that the GHG reduction goals will be met, in part, through local government actions. The CARB has identified a GHG reduction target of 15 percent from 2010 levels for local governments (municipal and community-wide) and notes that successful implementation of the plan relies on local governments' land use planning and urban growth decisions as local governments have primary authority to plan, zone, approve, and permit land development to accommodate population growth and the changing needs of their jurisdictions.

Pursuant to AB 32, the CARB adopted a Climate Change Scoping Plan in December 2008 (reapproved by the CARB on August 24, 2011 [CARB 2008]) outlining measures to meet the 2020 GHG reduction goals. In order to meet these goals, California must reduce its GHG emissions by 30 percent below projected 2020 business-as-usual emissions levels or about 15 percent from 2010 levels. The Scoping Plan recommends measures that are worth studying further, and that the State of California may implement, such as new fuel regulations. The Climate Change Scoping Plan Update (CARB 2014) details the progress towards meeting the 2020 reduction goal since the adoption of AB 32, as well as the GHG reduction framework to meet the 80 percent below 1990 levels by 2050. The primary focus areas identified in the Climate Change Scoping Plan Update are associated with energy, transportation, agriculture, water, waste management, natural and working lands, short-lived climate pollutants, green buildings, and cap-and-trade.

While several initiatives at the state level will help reduce GHG emissions, they alone will not be sufficient to meet the 2020 target recommended by CARB. In response to the State's efforts and to ensure the City of San Diego (City) contributes its fair share to statewide GHG reductions, the City has prepared the Climate Action Plan (CAP). The CAP identifies measures to effectively meet GHG reduction targets for 2020, as well as 2035 which serves as an "interim" target between the 2020 target and the state's longer term 2050 target.

This Draft Program Environmental Impact Report (PEIR) addresses the environmental impacts related to implementation of the City of San Diego CAP. CAPs are generally recognized by regional and state agencies as being an important planning tool for reducing emissions at the local level. The City's CAP outlines five strategies supported by actions for reducing municipal and community-wide GHG emissions. The CAP is a comprehensive document that functions as the framework for City GHG reduction strategies for the short, medium, and long term.

B. History and Relation to the General Plan

The General Plan, adopted in 2008, is the framework for the City's commitment to long-term conservation, sustainable growth, and resource management. It addresses GHG emission reductions through its City of Villages growth strategy and a wide range of inter-disciplinary policies.

The CAP identifies strategies and actions to reduce the City's carbon footprint, consistent with General Plan Policy CE-A.2:

Policy CE-A.2 to "reduce the City's carbon footprint" and to "develop and adopt new or amended regulations, programs and incentives as appropriate to implement the goals and policies set forth" related to climate change.

Consistent with General Plan Policy CE-A.13, the CAP updates and expands upon the first Climate Protection Action Plan (CPAP), which was approved in 2005:

Policy CE-A.13 to "regularly monitor, update, and implement the City's Climate Protection Action Plan, to ensure, at a minimum, compliance with all applicable federal, state, and local laws. "

The CPAP focused on reducing emissions from municipal operations and was central to fostering heightened awareness and developing "climate change literacy" within the City and the community.

C. Project Objectives

The objectives of the CAP are to:

- Provide a roadmap to achieve GHG reductions;
- Conform to California laws and regulations;
- Implement climate action policies of the General Plan;
- Provide CEQA streamlining for GHG emissions from new developments;

- Create green jobs through incentive-based policies, such as the manufacture and installation of solar panels;
- Improve public health by removing harmful pollutants from our air and improve water quality;
- Increase local control over the City's future by reducing dependence on imported water and energy;
- Enhance quality of life by supporting active transportation, planting trees and reducing landfill waste; and
- Save taxpayer money by decreasing municipal water, waste, and energy usage in City-owned buildings.

D. Contents of the CAP

The CAP contains five chapters: Background, Reducing Emissions, Implementation and Monitoring, Social Equity and Job Creation, and Adaptation. Appendices A through ~~EB~~ provide additional detail on topics covered within the CAP. A brief summary of each chapter follows:

- **Chapter 1 – Background:** Provides an introduction and purpose for the creation of the CAP. Specifically, the CAP serves as mitigation for the increased GHG emissions associated with implementation of the City's adopted General Plan as explained in Chapter 1. The General Plan calls for the City to reduce its carbon footprint through actions including adopting new or amended regulations, programs, and incentives. General Plan Policy CE-A.13 specifically identifies the need for an update of the City's 2005 CPAP that identifies actions and programs to reduce the GHG emissions of the community-at-large, and City operations. Additionally, with future implementing actions, it is anticipated that the CAP will serve as a "Qualified GHG Reduction Plan" for purposes of tiering under CEQA through 2020.
- **Chapter 2 – Reducing Emissions:** Delivers a baseline inventory for 2010; emission forecasts for 2020, 2030, and 2035; establishes reduction targets for 2020 and 2035; and identifies federal, state and local measures to reduce emissions that when totaled meet or exceed the 2020 and 2035 targets, putting the City on a trajectory toward achieving statewide 2050 targets.
- **Chapter 3 – Implementation and Monitoring:** Details the implementation action and phasing for individual goals. For each of the five strategies, the CAP identifies goals, actions, targets, supporting measures, parties responsible for implementation and estimated GHG reductions for 2020 and 2035. This chapter also illustrates the contents of the Annual Monitoring Report, including the results of the annual GHG inventory. The City anticipates that new technologies and innovative programs developed in the future can enhance, or even replace, the strategies and actions currently proposed. This consideration will allow the City to be flexible, yet diligent, in its effort to reduce emissions and prepare for a changing climate.
- **Chapter 4 – Social Equity and Job Creation:** Describes how the impacts of climate change will disproportionately affect disadvantaged communities and how the City can proactively identify those communities prior to project implementation. This chapter also illustrates how climate plan policies can lead to the creation of well-paying jobs and actions the City of San Diego is taking to promote economic growth.

- **Chapter 5 - Adaptation:** Identifies climate impacts for San Diego, illustrates current climate adaptation efforts throughout the state, and provides a guide to adaptation strategy development. This chapter then gives recommendations for adaptation strategies by sector, illustrates next steps, and discusses the economic considerations for strategy selection and implementation.
- ~~**Appendix A – Climate Action Plan CEQA Consistency Checklist:** Provides a tool for future projects to assess consistency with the CAP and determine the appropriate level of CEQA streamlining that could occur.~~
- ~~**Appendix B – Glossary of Terms and Acronyms:** Provides a definition for the terms and acronyms used throughout the CAP.~~
- **Appendix ~~CA~~.1 – Methods for Estimating GHG Reductions:** Provides information about the data, methods, and sources used to estimate the greenhouse gas reductions associated with the implementation strategies included in the CAP. Appendix ~~CA~~.1 provides common assumptions used across multiple measures, as well as specific information used to quantify strategies at the state/federal level, regional level, and local actions included within each of the five main strategies.
- **Appendix ~~CA~~.2 – Baseline and Emissions Projection Methods:** Describes the methodology used to estimate greenhouse gas emissions for the 2010 baseline year and the business-as-usual projection for the City of San Diego to estimate the level of emissions in 2020, 2030, and 2035 if no action were taken.
- **Appendix ~~CA~~.3 – Glossary of Terms and Acronyms:** Provides a definition for the terms and acronyms used throughout the CAP. ~~**Climate Adaptation Recommendations:** Provides recommendations concerning: public health and safety, water supply and services, urban infrastructure and community services, environmental health, open space, parks, and recreation, coastal management and protection, urban forest management and local food production, building and occupant readiness, community education, knowledge and collaboration.~~
- **Appendix B – Transit Priority Area Map:** Provides a map based on the SANDAG 2050 Regional Transportation Plan (RTP) displaying areas within one-half mile of a major transportation stop.

E. CAP GHG Inventory and Reduction Potential

The GHG emissions inventory evaluated energy and emissions related activities within the City of San Diego in the baseline year 2010 for five major sectors, including residential buildings, nonresidential, transportation, water, solid waste, and municipal operations. Such emissions were associated with a variety of sources, including direct combustion of fossil fuels, purchased electricity, transportation (gasoline), solid waste, potable water, and materials. These sources are described in greater detail in Appendix ~~CA~~ of the CAP. The CAP estimates the GHG emissions for the City of San Diego in the baseline year 2010 were approximately 13.0 million metric tons of carbon dioxide equivalent (MMT CO₂e), of which the largest contributing sector was transportation (54.55 percent), followed by electricity use (24 percent), natural gas use (16 percent), and solid waste and wastewater collection, disposal, and treatment (5 percent). The CAP uses a 2010 baseline pursuant to a recommendation from CARB that local governments set a 2020

reduction target of 15 percent below current emissions. Given the relatively close timeframe, data and information from 2020 provided a reliable baseline of emissions for the City to use to set its reduction targets. The methods used to estimate GHG emissions for 2010 are consistent with the U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions.

Following direction provided in the CARB Scoping Plan, the CAP determined an estimate of future emissions in the target years under a “business-as-usual” scenario. By 2020 the CAP estimates the City’s emissions would increase to approximately 14.1 MMT CO₂e, 15.97 MMT CO₂e in 2030, and to approximately 16.74 MMT CO₂e by 2035. With implementation of the CAP, the City aims at a minimum to reduce emissions to ~~25~~24 percent below the 2010 baseline by 2020 to approximately 11.04 MMT CO₂e, to ~~44~~40 percent below the 2010 baseline by 2030 to approximately 7.8 MMT CO₂e, and by a total of 50 percent below the 2010 baseline by 2035 to approximately 6.5 MMT CO₂e. With implementation of the CAP, it is anticipated that the City would exceed its reduction target by approximately 1.23 MMT CO₂e in 2020, ~~176,528~~ 211,196 MT CO₂e in 2030, and ~~127,136~~ 205,462 MT CO₂e in 2035. **Table 2-1** summarizes the City’s GHG inventory, projections, and target achievement anticipated through CAP implementation.

TABLE 2-1
ESTIMATED GHG REDUCTION POTENTIAL OF CAP STRATEGIES

Reductions from:	2020 MT CO ₂ e	2030 MT CO ₂ e	2035 MT CO ₂ e
2010 Baseline Emissions	<u>43,019,594</u>	<u>43,019,594</u>	<u>43,019,594</u>
	<u>12,984,993</u>	<u>12,984,993</u>	<u>12,984,993</u>
Total Projected Emissions (Business-as-Usual)	<u>44,067,316</u>	<u>45,667,449</u>	<u>46,427,118</u>
	<u>14,124,690</u>	<u>15,856,604</u>	<u>16,716,020</u>
Estimated GHG Reductions from CAP	<u>(4,275,421)</u>	<u>(8,032,274)</u>	<u>(10,044,459)</u>
	<u>(3,087,445)</u>	<u>(8,065,608)</u>	<u>(10,223,523)</u>
GHG Emissions with Implementation of the CAP	<u>9,791,894</u>	<u>7,635,226</u>	<u>6,382,659</u>
	<u>9,793,744</u>	<u>7,579,800</u>	<u>6,287,035</u>
City Target Emissions Levels	<u>41,066,652</u>	<u>7,811,754</u>	<u>6,509,795</u>
	<u>11,037,244</u>	<u>7,790,996</u>	<u>6,492,497</u>
	<u>(1,274,758)</u>	<u>(176,528)</u>	<u>(127,136)</u>
<i>Additional Reduction Below City Target</i>	<u>(1,243,500)</u>	<u>(211,196)</u>	<u>(205,462)</u>

SOURCE: City of San Diego, 2015

F. Greenhouse Gas Reduction Strategies and Actions

The CAP relies on regional actions, continued implementation of federal and state mandates, and local actions for target attainment.

State and Regional Actions

State and regional actions include regional land use and transportation planning efforts undertaken by the San Diego Association of Governments (SANDAG), pursuant to Senate Bill 375, through their Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS), as well as

renewable energy legislation at the state level through the Renewable Portfolio Standard and California Solar Programs. Additional state actions include vehicle fuel efficiency and lowering the carbon content of vehicle fuels. **Table 2-2** shows the GHG reduction potential of regional and state actions that the CAP takes into account. In 2020, 2030, and 2035, a majority of the GHG reductions are associated with actions taken at a regional and state level (90 percent in 2020, ~~74~~ 85 percent in 2030, and ~~65~~ 76 percent in 2035).

**TABLE 2-2
ESTIMATED GHG REDUCTION POTENTIAL OF STATE AND REGIONAL ACTIONS**

Reductions from:	2020 MT CO ₂ e		2030 MT CO ₂ e		2035 MT CO ₂ e	
	Number	Percent	Number	Percent	Number	Percent
SANDAG – RTP/SCS	397,684	9.3	650,194	8.4	794,885	7.9
	<u>397,580</u>	<u>10.2</u>	<u>661,061</u>	<u>9.4</u>	<u>792,801</u>	<u>10.0</u>
	854,144	20.0	739,952	9.4	390,592	3.9
CA Renewable Portfolio Standards	<u>887,084</u>	<u>22.7</u>	<u>840,086</u>	<u>11.9</u>	<u>398,249</u>	<u>5.0</u>
CA RPS – Community Choice Aggregation or Another Program	-	0.0	980,098	13.9	1,592,878	20.2
CA Energy Efficiency Policies and Programs	176,338	4.4	533,412	6.6	752,619	7.5
<u>CA Solar Programs</u>	<u>154,975</u>	<u>4.0</u>	<u>426,262</u>	<u>6.1</u>	<u>572,333</u>	<u>7.2</u>
CA Solar Programs	1,363,898	34.9	2,254,450	28.0	2,347,720	23.4
<u>CA Vehicle Efficiency Standards – Pavley 1/CAFE</u>	<u>1,407,061</u>	<u>36.0</u>	<u>2,373,735</u>	<u>33.7</u>	<u>2,498,388</u>	<u>31.6</u>
CA Vehicle Efficiency Standards – Pavley 1/CAFE	609,197	14.2	541,815	6.7	534,949	5.3
<u>CA Low Carbon Fuel Standard</u>	<u>628,425</u>	<u>16.1</u>	<u>571,210</u>	<u>8.1</u>	<u>569,268</u>	<u>7.2</u>
CA Low Carbon Fuel Standard	193,675	4.5	741,895	9.2	1,155,929	11.5
<u>CA Electric Vehicle Policies and Programs</u>	<u>196,542</u>	<u>5.0</u>	<u>758,803</u>	<u>10.8</u>	<u>1,185,078</u>	<u>15.0</u>
CA Electric Vehicle Policies and Programs	223,835		475,739	5.9	498,564	5.0
<u>CA Energy Efficiency Policies and Programs</u>	<u>202,142</u>	<u>5.2</u>	<u>387,265</u>	<u>5.5</u>	<u>257,192</u>	<u>3.3</u>
CA CARB Tire Pressure Program	25,920	0.6	27,840	0.3	28,800	0.3
<u>CA CARB Heavy Duty Vehicle Aerodynamics</u>	<u>8,100</u>	<u>0.2</u>	<u>8,700</u>	<u>0.1</u>	<u>9,000</u>	<u>0.1</u>
Total State and Regional Actions	3,852,788	90.4	5,970,997	74.3	6,513,058	64.8
	<u>3,907,829</u>	<u>90.2</u>	<u>7,015,059</u>	<u>84.8</u>	<u>7,903,957</u>	<u>75.8</u>
Total Local CAP Reductions	422,633	9.9	2,061,277	25.7	3,531,404	35.2
	<u>423,116</u>	<u>9.8</u>	<u>1,261,745</u>	<u>15.2</u>	<u>2,525,027</u>	<u>24.2</u>
Total CAP Reductions	4,275,421		8,032,273		10,044,459	
	<u>4,330,945</u>	<u>100.0</u>	<u>8,276,803</u>	<u>100.0</u>	<u>10,428,984</u>	<u>100.0</u>

SOURCE: San Diego, 2015

Senate Bill 375 and Transit Priority Areas

An important regional action that the CAP relies on is the implementation of Senate Bill 375 (SB 375), which establishes mechanisms for the development of regional targets for reducing passenger vehicle greenhouse gas emissions. SB 375 was adopted by the state on September 30, 2008. In compliance with SB 375, SANDAG adopted the 2050 RTP/SCS on October 28, 2011.

The RTP/SCS serves as the region's comprehensive long-range transportation planning document by encouraging public policy decisions that will result in balanced investments for a wide range of multimodal transportation improvements. The RTP/SCS is intended to achieve the goals of SB 375, and can be implemented through existing and planned programs or policies. The RTP/SCS consists of strategies to guide new policies and infrastructure development based on recent household and job growth forecasts, market demand and economic studies, and transportation studies.

For the 2050 RTP/SCS, SANDAG staff worked directly with local jurisdictions to include land use and transportation data into the 2050 Regional Growth Forecast. For the City of San Diego, existing plans were assumed in the 2050 Growth Forecast for most communities, and draft plans were used for Otay Mesa, Barrio Logan, Grantville, and Carol Canyon; more intensive redevelopment was presumed within existing plans in some urban core communities for years 2035-2050.

As outlined in the City's General Plan, future growth would be centered around transportation corridors and urban villages, in "Transit Priority Areas" (TPAs). TPAs are addressed in SB 743 to align regional transportation, land use, housing, and GHG emissions planning through the SCS, which illustrates how SANDAG would meet a GHG reduction target for passenger vehicles established by the CARB. A TPA is an area within a half-mile of high quality transit such as a rail stop or a bus corridor that provides or will provide at least 15-minute frequency service during peak hours by the year 2035. SB 743 defines a TPA as, "an area within half a mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations."^{1,2,3}

In addition to connecting regional planning processes, SB 375 was also intended to make it easier for communities to expand housing and transportation choices. A key element of SB 375 is the option for regions and their local governments to provide significant CEQA regulatory streamlining incentives for projects in a TPA.

Figure 2-1 illustrates the TPAs in the SANDAG 2050 RTP/SCS, for the long-term (2035). The CAP projects a reduction of ~~397,681~~ 397,580 MT CO₂e in 2020, ~~650,194~~ 661,061 MT CO₂e in 2030, and ~~794,885~~ 792,801 MT CO₂e in 2035 from the implementation of the SANDAG RTP/SCS.

- ¹ Section 450.216 addresses development and content of the Statewide Transportation Improvement Program (STIP). STIPs cover a period of no less than four years.
- ² Section 450.322 refers to development and content of the Metropolitan Transportation Plan. The RTP has at least a 20-year planning horizon.
- ³ Major Transit Stop, as defined in Section 21064.3, means: "a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service of 15 minutes or less during the morning and afternoon peak commute periods."

Local Actions

The CAP is focused around five primary strategies that would be implemented by 17 actions and 32 supporting measures that include new ordinances, City Council policies, resolutions, programs, incentives, and outreach and education activities and together would amount to the estimated reduction in GHGs. The relationship of the strategies, actions, and supporting measures is described below.

Strategy 1: Water & Energy Efficient Buildings

The goals of Strategy 1, Energy and Water Efficient Buildings, are to reduce energy consumption in residential building and municipal facilities, and to reduce per capita water use. Proposed actions to implement Strategy 1, Energy and Water Efficient Buildings, include the following:

Action 1.1: Present to City Council for consideration a Residential Energy Conservation and Disclosure Ordinance.

The target for Action 1.1 is to reduce energy use by 15 percent per unit in 20 percent of residential housing units by 2020 and 50 percent of units by 2035. An ordinance would require single family and multi-family residential property owners to disclose energy use prior to the sale of property. Residential energy efficiency improvements that may be encouraged by the disclosure include: water heater replacement or insulation wrapping; insulation of hot and cold water piping; exterior door weather-stripping; sealing and insulating furnace ducts; retrofitting chimneys with dampers, doors, or closures; installing or replacing ceiling insulation; and replacing incandescent light bulbs with compact fluorescent lamps (CFLs) or light emitting diode (LED) lighting.

Action 1.2: Present to City Council for consideration a Municipal Energy Strategy and Implementation Plan.

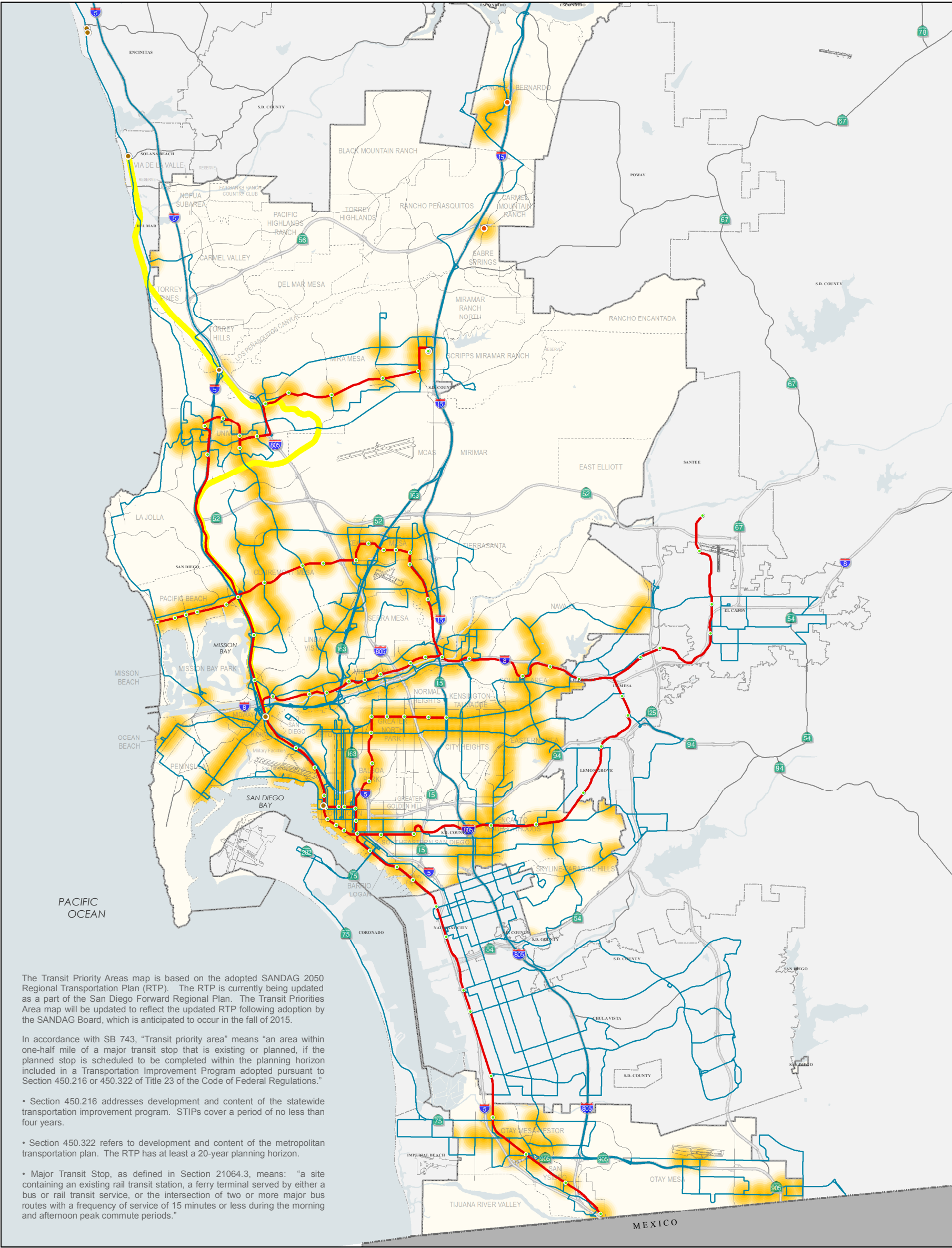
The target for Action 1.2 is to reduce energy consumption at municipal facilities by 15 percent by 2020 and an additional 25 percent by 2035.

Implementation of a Municipal Energy Strategy would result in energy efficiency improvements to City-owned buildings and facilities. This could include replacing appliances, fixtures, and lighting; improvements to the building envelope; changes to the City's operational policies; and the installation of rooftop and parking lot solar systems.

Action 1.3: Support water rate structures that provide pricing signals that encourage water conservation and reuse, including greywater use, within the limits established by Propositions 218 and 26.

The target for Action 1.3 is to reduce daily per capita water consumption by 4 gallons by 2020 and 9 gallons by 2035.

Water rate structures can be used to influence customer's water use behavior and encourage the installation of water efficiency improvements to reduce water bill costs. Such improvements could include replacing toilets, showers, and faucet fixtures; installing efficient irrigation systems; installing landscaping that uses less water; or installing on-site graywater systems.



The Transit Priority Areas map is based on the adopted SANDAG 2050 Regional Transportation Plan (RTP). The RTP is currently being updated as a part of the San Diego Forward Regional Plan. The Transit Priorities Area map will be updated to reflect the updated RTP following adoption by the SANDAG Board, which is anticipated to occur in the fall of 2015.

In accordance with SB 743, "Transit priority area" means "an area within one-half mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations."

- Section 450.216 addresses development and content of the statewide transportation improvement program. STIPs cover a period of no less than four years.
- Section 450.322 refers to development and content of the metropolitan transportation plan. The RTP has at least a 20-year planning horizon.
- Major Transit Stop, as defined in Section 21064.3, means: "a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service of 15 minutes or less during the morning and afternoon peak commute periods."

Long Term through 2035

Legend

- Trolley Stations

Coaster Station

Rapid Bus Station

High Frequency Routes

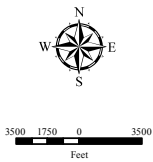
Trolley Lines

Coaster Line

Transit Priority Area

Planning Areas

Municipal Boundaries



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Action 1.4: Present to City Council for consideration a Water Conservation and Disclosure Ordinance.

The target for Action 1.4 is to reduce daily per capita water consumption by 4 gallons by 2020 and 9 gallons by 2035.

Similar to a residential conservation and disclosure ordinance, this action would require disclosure of water use prior to sale. The action would encourage improvements such as replacing toilets, showers, and faucet fixtures; installing efficient irrigation systems; installing landscaping that uses less water; or installing on-site graywater systems.

Action 1.5: Implement an Outdoor Landscaping Ordinance that requires use of weather-based irrigation controllers.

The target for Action 1.5 is to reduce daily per capita water consumption by an additional 3 gallons by 2020 and an additional 5 gallons by 2035.

An Outdoor Landscaping Ordinance would result in more efficient landscape irrigation systems and could encourage the installation of landscaping that uses less water.

The CAP includes several Supporting Measures for Strategy 1, Energy and Water Efficient Buildings, which include the following:

- Expand the Property-Assessed Clean Energy (PACE) financing programs to further support residential and non-residential energy and water efficiency actions.
- Expand incentive programs that further promote energy and water efficiency in residential and nonresidential buildings.
- Implementation of amendments to the City's Building Code that require installation of cool roof materials consistent with the supplementary measures contained in the CalGreen Code for new construction, significant repairs to existing roofs, and re-roofing.
- Implement a Smart Energy Management & Monitoring System (SEMMS) for municipal facilities to monitor and track energy consumption. Based upon results, staff will identify opportunities for greater efficiency and demand response.
- Develop a Zero Net Energy Policy for new municipal-owned buildings.
- Pursue LEED for Existing Buildings: Operation and Maintenance Certification for municipal facilities.
- Record the annual volume percentage of recycled water used and planned to be introduced through 2035. The report will include plans for increasing future annual volumes of recycled water/potable reuse as well as report the number of grey water permits filed for systems discharging more than 250 gallons per day.
- Pursue additional financial resources and incentives for implementing energy and water efficiency measures identified by the conservation and disclosure ordinances, and to promote the expansion of greywater systems.

Strategy 2: Clean & Renewable Energy

As stated in the CAP, the goal for Strategy 2, Clean and Renewable Energy, is to achieve 100 percent renewable energy supply to the City's electricity grid by the year 2035. Proposed actions to implement this strategy include the following:

Action 2.1: Present to City Council for consideration a Community Choice Aggregation (CCA) Program or another program that increases the renewable energy supply on the electrical grid.

The target for Action 2.1 is to add additional renewable electricity supply to achieve 100 percent renewable electricity by 2035 city-wide.

The City's renewable energy program would include presenting an ordinance to City Council to require new residential and non-residential construction to install conduit for future photovoltaic and electric vehicle (EV) charging stations, and to install plumbing for future solar water heating. Further, should the CCA Program or another program not be implemented, the City will explore the option of utilizing renewable energy credits (RECs) to contribute toward the 100 percent renewable energy target.

The CAP includes several Supporting Measures for Action 2.1 Clean and Renewable Energy, which include the following:

- Complete a citywide Community Choice Aggregation Feasibility Study, which would include timelines for implementation and analyze potential costs.
- Implement General Plan Policy CE-A.5 to achieve net zero energy consumption by employing sustainable or "green" building techniques for the construction and operation of buildings.
- Support the State's implementation of the Green Tariff Shared Renewables Program.
- Establish policies, programs and ordinances that facilitate and promote siting of new onsite photovoltaic energy generation and energy storage systems.
- Provide adequate funding and resources to meet increased demand for solar photovoltaic and energy storage permitting.
- Encourage solar photovoltaic installations through implementation of a professional-certification permitting program.

Action 2.2: Increase municipal zero emissions vehicles.

The target for Action 2.2 is to increase the number of zero emissions vehicles in the municipal fleet to 50 percent by 2020 and 90 percent by 2035.

This action would involve replacing the City's existing vehicle fleet with zero emission vehicles (ZEVs), which include hydrogen fuel cell electric vehicles, battery electric vehicles and plug-in hybrid electric vehicles. This action would likely require the installation of electric vehicle charging stations and/or hydrogen fueling stations to support the increase in ZEV use.

Action 2.3: Present to City Council for consideration a Municipal Alternative Fuel Policy.

The target for Action 2.3 is to achieve 100 percent conversion from diesel fuel used by municipal solid waste collection trucks to compressed natural gas or other alternative low emission fuels by 2035.

This action would involve replacing the City's existing vehicle fleet with zero emission vehicles. This action would likely require the installation of hydrogen or compressed natural gas fueling stations.

Strategy 3: Bicycling, Walking, Transit & Land Use

As stated in the CAP, the goals for Strategy 3, Bicycling, Walking, Transit and Land Use, are to increase the use of mass transit, increase commuter walking and bicycling opportunities, and promote the effective land use to reduce vehicle miles traveled. Proposed actions to implement this strategy include the following:

Action 3.1: Implement the General Plan's Mobility Element and the City of Villages strategy in TPAs⁴ to increase the use of transit.

The target for Action 3.1 is to achieve mass transit mode share of 12 percent by 2020 and 25 percent by 2035 in TPAs.

The City of Villages strategy is the overarching vision for future land use in the City of San Diego. The strategy would encourage the intensification of land uses in TPAs that would allow more residents to rely on transit for their primary commute mode. The strategy does not specifically assign uses to land in the City, but rather would be implemented with the update and adoption of each community plan.

Action 3.2: Implement the City of San Diego's Pedestrian Master Plan in TPAs to increase commuter walking opportunities.

The target for Action 3.2 is to achieve walking commuter mode share of 3 percent by 2020 and 7 percent by 2035 in TPAs. This action would expand pedestrian amenities and facilities, including the extension and improvement of sidewalks, as described in the Pedestrian Master Plan.

Action 3.3: Implement the City of San Diego's Bicycle Master Plan to increase commuter bicycling opportunities.

The target for Action 3.3 is to achieve 6 percent bicycle commuter mode share by 2020 and 18 percent mode share by 2035 in TPAs. This action would expand bicycle amenities and facilities, including the extension of bicycle lanes, as described in the Bicycle Master Plan.

Action 3.4: Implement a Traffic Signal Master Plan to retime traffic signals to reduce vehicle fuel consumption.

⁴ TPAs, shown in Figure 2-1, are based on the adopted SANDAG 2050 Regional Transportation Plan (RTP), which is currently being updated as a part of the San Diego Forward Regional Plan. The Transit Priorities Area map will be updated to reflect the updated RTP following adoption by the SANDAG Board, which is anticipated to occur in the fall of 2015. SB 743 established Section 21099 of the California Public Resources Code (CPRC), which states: "Transit priority area" means "an area within one-half mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations."

The target for Action 3.4 is to retime 200 traffic signals by 2020. This action would involve adjustments to the operation of existing traffic signals.

Action 3.5: Implement a Roundabouts Master Plan to install roundabouts to reduce vehicle fuel consumption.

The target for Action 3.5 is to install roundabouts at 15 intersections by 2020 and an additional 20 intersections by 2035.

This action would involve the construction of roundabouts at existing intersections.

Action 3.6: Implement transit-oriented development within TPAs.

The target for Action 3.6 is to reduce average vehicle commute distance by two miles through implementation of the General Plan's City of Villages Strategy by 2035.

Similar to Action 3.1, this action would facilitate the implementation of the City of Villages Strategy, which would result in the concentration of new development in TPAs.

The CAP includes several supporting measures for Strategy 3, Bicycling, Walking, Transit and Land Use:

- Implement bicycle improvements concurrent with street re-surfacing projects, including lane diets, green bike lanes, sharrows, and buffered bike lanes.
- Implement a bicycle sharing program with DecoBikes. Reduce the "1 mile" barrier gap by ensuring that further expansion of the bike share program is designed and implemented to reduce the distance needed to travel between transit stops and destinations.
- Identify and address gaps in the City's pedestrian network and opportunities for improved pedestrian crossings, using the City's Pedestrian Master Plan and the City's sidewalk assessment.
- Adopt City portions of SANDAG's forthcoming first mile/last mile initiative and incorporate Safe Routes to Transit strategies in TPAs.
- Coordinate pedestrian counting programs with SANDAG and SDSU Active Transportation Research Programs.
- Develop a Parking Plan to include measures such as "unbundled parking" for nonresidential and residential sectors in urban areas.
- Prepare a Commuter Report with measures to increase commuting by transit for City employees.
- Achieve better walkability and transit-supportive densities by locating a majority of all new residential development within TPAs.
- Develop a new priority ranking for infrastructure improvements in TPAs that will be integrated into Capital Improvement Priority Matrix, Community Development Block Grant opportunities and Public Facilities Financing Plans.
- Implement infrastructure improvements to facilitate alternative transportation modes for all travel trips, in addition to commuting.

- Present to City Council for consideration an Electric Vehicle Charging Plan.

Strategy 4: Zero Waste

As stated in the CAP, the goals for Strategy 4, Zero Waste include increasing diversion of solid waste and increasing capture of methane gas from landfills and wastewater treatment plants.

Proposed actions to implement this strategy include the following:

Action 4.1: Present to City Council for consideration a Zero Waste Plan, and implement landfill gas collection operational procedures in compliance with the California Air Resources Board's Landfill Methane Capture regulations.

The target for Action 4.1 is to divert 75 percent of solid waste by 2020 and 90 percent by 2035 and capture 80 percent of remaining landfill emissions by 2020 and 90 percent by 2035.

Action 4.2: Implement operational procedures to capture methane gas from wastewater treatment.

The target for Action 4.2 is to capture 98 percent of wastewater treatment gases by 2035.

The CAP includes several supporting measures for Strategy 4, Zero Waste:

- Develop a Resource Recovery Center and “one-stop shop” at Miramar Landfill that provides opportunities to maximize waste diversion.
- Convert curbside recycling and curbside greenery collection programs to a weekly basis and add kitchen scraps to greenery.

Strategy 5: Climate Resiliency

As stated in the CAP the goal for Strategy 5, Climate Resiliency is to increase the urban tree canopy coverage. Proposed actions to implement this strategy include the following:

Action 5.1: Present to City Council for consideration a city-wide Urban Tree Planting Program.

The target for Action 5.1 is to achieve 15 percent urban tree canopy coverage by 2020 and 35 percent urban tree coverage by 2035. The program would include water conservation measures to minimize water use for tree plantings. The measures would include planting drought-tolerant and native trees, and prioritizing tree planting in areas with recycled water and greywater infrastructure.

The CAP includes several supporting measures for Strategy 5, Climate Resiliency:

- Develop a regional (Western San Diego County) Urban Tree Canopy Assessment in collaboration with other regional jurisdictions and SANDAG.
- Prepare a Parks Master Plan that prioritizes parks in underserved communities.
- Hire an Urban Forest Program Manager.
- Plan for the long-term maintenance of additional trees and ensure sufficient staff and funding are available.
- Complete the Urban Forest Management Plan and present to City Council for adoption.

Table 2-3 shows the GHG reduction potential of the CAP strategies and actions. The GHG reduction potential of supporting measures is not quantified; rather, it is assumed that the supporting measures would support implementation of and therefore contribute to the GHG reduction potential of the strategies and actions.

**TABLE 2-3
ESTIMATED GHG REDUCTION POTENTIAL OF LOCAL STRATEGIES**

Reductions from:	2020 MT CO ₂ e		2030 MT CO ₂ e		2035 MT CO ₂ e	
	Number	Percent	Number	Percent	Number	Percent
Strategy 1: Water & Energy Efficient Buildings	41,334 41,615	9.8 9.9	53,650 55,133	2.6 4.4	47,049 49,016	4.3 1.9
1.1 Residential Energy Conservation, and Disclosure and Benchmarking Ordinance	3,195 3,218		5,840 6,078	0.3 0.5	5,374 5,605	
		0.8				0.2
1.2 City of San Diego's Municipal Energy Strategy and Implementation Plan	11,457 11,580		11,882 12,321	0.6 1.0	8,389 9,011	0.2 0.4
		2.7				
1.3 New Water Rate and Billing Structure	12,096 12,210		14,509 14,948	0.7 1.2	11,657 12,277	0.3 0.5
		2.9				
1.4 Water Conservation, Disclosure and Benchmarking Ordinance	12,527 12,589		19,649 19,898	1.0 1.6	21,113 21,470	0.6 0.9
		3.0				
1.5 Outdoor Landscaping Ordinance	2,059 2,090		1,770 1,888		486 653	
		0.5		0.1		0.0
Strategy 2: Clean & Renewable Energy	14,162 14,162	3.4 3.3	1,314,955 558,376	63.8 44.3	2,635,947 1,624,881	74.6 64.4
2.1 Community Choice Aggregation Program or Another Similar Program	0 0		1,287,833 531,254	62.5 42.1	2,603,944 1,592,878	73.7 63.1
		0.0				
2.2 Municipal Zero Emissions Vehicles	12,144 12,144	2.9 2.8	18,621 18,621	0.9 1.5	21,859 21,859	0.6 0.9
2.3 Convert Municipal Waste Collection Trucks to Low Emission Fuel	2,018 2,018		8,501 8,501	0.4 0.7	10,144 10,144	0.3 0.4
		0.5				
Strategy 3: Bicycling, Walking, Transit & Land Use	152,407 152,537	36.1 36.1	308,556 264,130	15.0 20.9	383,197 385,891	40.9 15.3
	119,132 119,234		182,727 138,026	8.9 10.9	241,490 213,573	6.0 8.5
3.1 Mass Transit	1,094 1,092		1,334 1,338		1,474 1,488	0.0 0.1
		0.3		0.1		
3.2 Commuter Walking	19,064 19,077		39,964 40,177	1.9 3.2	50,084 50,574	1.4 2.0
		4.5				
3.3 Commuter Bicycling	11,014 11,024		8,983 9,032	0.4 0.7	8,426 8,508	0.2 0.3
		2.6				
3.4 Retiming Traffic Signals	2,409 2,110		2,503 2,506	0.1 0.2	2,154 2,172	
		0.5				0.1
3.5 Install Roundabouts	2,110 2,110		2,506 2,506	0.2 0.2	2,172 2,172	
		0.5				
3.6 Promote Effective Land Use to Reduce Vehicle Miles Traveled	0 0		73,051 73,051	3.6 5.8	109,576 109,576	3.4 4.3
		0.0				

TABLE 2-3 (Continued)
ESTIMATED GHG REDUCTION POTENTIAL OF LOCAL STRATEGIES

Reductions from:	2020 MT CO ₂ e		2030 MT CO ₂ e		2035 MT CO ₂ e	
	Number	Percent	Number	Percent	Number	Percent
Strategy 4: Zero Waste	170,891	40.4	301,309	44.6 23.9	362,948	40.3 14.4
4.1 Divert Solid Waste and Capture Landfill Emissions	154,467	36.5	283,309	43.7 22.5	344,213	9.7 13.6
4.2 Capture Methane from Wastewater Treatment	16,424	3.9	18,000	0.9 1.4	18,735	0.5 0.8
Strategy 5: Climate Resiliency	43,839	10.4	82,806	4.0 6.6	102,290	2.9 4.1
5.1 Urban Tree Planting Program	43,839	10.4	82,806	4.0 6.6	102,290	2.9 4.1
Total Local Reductions	422,633 423,116	100	2,061,277 1,261,745	100	3,531,404 2,525,027	100

SOURCE: City of San Diego, 2015

As shown in the table, in 2020 over half of the anticipated reductions are attributed to transportation-related measures, including the expansion of electric vehicle charging infrastructure, mass transit service, and bicycle commuter amenities. Other significant local actions in 2020 include implementation of a zero waste strategy (40 percent of total local actions). In 2020, energy related programs make up a relatively small portion of the total local reductions; however, in 2035 the City anticipates that over half of the GHG reductions would be attributed to switching to low carbon energy sources through a CCA Program, large scale renewable energy development, or other method.

G. CAP Implementation

Implementation of the CAP is planned to occur over three separate phases that take advantage of easy short term actions to meet the 2020 target and then build up to more complex solutions as the 2035 target approaches.

- **Phase 1: Early Actions** (January 1, 2015-December 31, 2017) – Short-term actions that are high priority with large emissions reductions that would lay the foundation for longer-term actions.
- **Phase 2: Mid-Term Actions** (January 1, 2018-December 31, 2020) – Actions specifically focused on helping the City reach its 2020 GHG Emissions Reduction Target.
- **Phase 3: Longer-Term Actions** (2021-2035) – Actions focused on helping the City reach its 2035 GHG Emissions Reduction Target.

H. CAP Monitoring and Reporting

The City is responsible for CAP implementation and with future implementing actions, ensuring that GHG emissions reductions are consistent with the level needed for CEQA tiering of development projects, pursuant to the CEQA Guidelines Section 15183.5, to remain valid. This includes ensuring that growth assumptions used in the CAP to forecast future emissions are not exceeded. These assumptions are summarized in **Table 2-4** below (based on Table 2 of the CAP Appendix A). ~~If total population, housing units, or commercial building area exceeds these projections, then project level CEQA streamlining of GHG emissions may no longer be valid.~~

**TABLE 2-4
GROWTH ASSUMPTIONS USED IN THE CITY OF SAN DIEGO CLIMATE ACTION PLAN**

Data Category	2010	2020	2035
Population	1,359,578	1,542,324	1,759,271
Single Family Housing Units	280,455	286,261	277,679
Multi-Family Housing Units	233,383	286,675	374,215
Commercial Building Area (Million Square Feet)	291	328	398

SOURCE: City of San Diego 2015a.

The CAP includes the following monitoring and reporting responsibilities for ensuring effective implementation of the CAP, and with future implementing actions, for ensuring that the CAP would remains qualified for use with later activities under CEQA Guidelines Section 15183.5(b)(2) ~~and the CAP Consistency Checklist remains valid~~. The City of San Diego is the designated lead agency for the existing Mitigation Monitoring and Reporting Program (MMRP) for the General Plan. The MMRP is used in preparing the Annual Monitoring Report to the City Council on the status of the City's progress in implementing the General Plan.⁵ The CAP Annual Monitoring Report will include data, discussion, and conclusions regarding the CAP monitoring activities below.

- The City CAP Implementation Program Manager will oversee the implementation and monitoring of all actions outlined in the CAP.
- Staff will conduct an inventory of community-wide GHG emissions and develop an Annual Monitoring Report that will include specific actions, proposed outcomes and a timeline with milestones to track success in meeting 2020 and 2035 targets, and will require amendment of the CAP if it is not achieving the GHG emissions reductions outlined in the CAP, or where otherwise required by law.
- Staff will annually evaluate city policies, plans and codes (including the CAP) as needed to ensure the CAP reduction targets are met. Any actions requiring City Council approval will be brought back to City Council for consideration.

⁵ See Table CE-1 in MMRP: Issues Related to Climate Change Addressed in the General Plan

- The City’s Environmental Services Department will complete an annual carbon (GHG) inventory as part of the Annual Monitoring Report to be verified through a third-party to ensure it is accurate and complete.
- The Annual Monitoring Report will track the effect of CAP’s actions and programs on local employment to the extent feasible. Staff will follow the methodology for employment data collection used by the Bureau of Labor Statistics (BLS) green jobs initiative. Staff will collect data from the Quarterly Census of Employment and Wages and Occupational Employment Statistics programs.
- ~~City will evaluate the CAP and the CAP Consistency Review Checklist every 5 years (at minimum) to determine whether updates are necessary.~~

~~I. Greenhouse Gas Emission Screening Criteria~~

~~City of San Diego Draft Screening Criteria for Greenhouse Gas Emissions~~

~~As a companion document to the CAP, the City has prepared screening criteria for GHG emissions generated by future projects. The purpose of the screening criteria is to provide guidance to City staff conducting CEQA review to ensure a consistent and objective evaluation of the potential for significant effects from proposed projects that will result in the emission of GHGs. This “bright-line” numeric screening criterion for annual operational emissions will be used to assess whether a project conflicts with existing California legislation adopted to reduce statewide anthropogenic GHG emissions, based on substantial evidence demonstrating that a defined level of project emissions would make a considerable contribution to the cumulative impact on GHG emissions. A screening criterion would be used to determine if modeled emissions would have a less than significant cumulative impact. Emissions above the screening criterion would need to complete the CAP Consistency Checklist to determine if the impact is significant. The City’s Draft Greenhouse Gas Emission Screening Criteria includes a table of development types that would fall below this numeric screening criterion (City of San Diego, 2015b).~~

~~II. Required Approvals~~

~~The City will decide whether to certify the PEIR and adopt the proposed project (the Climate Action Plan). There are no other required agency approvals as these are policy matters for the City. Some of the implementing actions of the CAP may involve other agencies, such as SANDAG, concerning expanded transit service, or other local jurisdictions regarding the development of potential renewable energy projects, but such actions will require additional project-level CEQA evaluation at which time such agencies would be involved as a lead or approving agency.~~

KJ. Potential for Environmental Impacts

One of the purposes of this PEIR is to determine if implementation of the CAP could result in significant adverse impacts on the environment. As a way of framing the environmental analysis for Chapter 2, Environmental Setting, Impacts, and Mitigation Measures, **Table 2-5** provides a summary of the potential for each proposed CAP action to cause an adverse physical impact on the environment, and shows the CEQA environmental topic areas potentially affected. In each section of Chapter 2, Environmental Setting, Impacts, and Mitigation Measures, the impact analysis focuses on those CAP actions that are shown in Table 2-5 as having a potential to cause adverse impacts on the environmental issue area being examined. Chapter 6, Other CEQA Considerations, includes a brief discussion of each environmental issue area that is not expected to be adversely affected by implementation of any of the CAP actions.

**TABLE 2-5
MATRIX OF CAP ACTIONS/POTENTIAL FOR ENVIRONMENTAL EFFECTS**

CAP Strategies/Actions	Target	Potential Physical Changes to the Environment	Environmental Issue Areas Potentially Affected
Strategy 1: Water & Energy Efficient Buildings			
Action 1.1 Residential Energy Conservation and Disclosure Ordinance	Reduce energy use by 15 percent per unit in 20 percent of residential housing units by 2020 and 50 percent of units by 2035.	Minor changes to existing residences, including insulation, weather stripping, cool roofing; and use of energy and water conserving design, materials and appliances in new construction; generally would require ministerial approval only.	<ul style="list-style-type: none"> • Historical Resources
Action 1.2: City of San Diego's Municipal Energy Strategy and Implementation Plan	Reduce energy consumption at municipal facilities by 15 percent by 2020 and an additional 25 percent by 2035.	Retrofitting of existing municipal facilities and incorporation of energy saving design, materials, and appliances in new construction, would not increase potential for new or retrofit construction to cause adverse physical environmental changes.	None
Action 1.3 New Water Rate and Billing Structure	Reduce daily per capita water consumption by 4 gallons by 2020 and 9 gallons by 2035 from a potential new water rate billing structure	New and expanded water conservation measures would result in minor modifications to existing construction (such as installation of water-conserving appliances) and additional requirements for new construction. Would encourage use of water-conserving landscaping. Would increase use of greywater systems for irrigation of landscaping, which could have long-term and cumulative effect on soil and groundwater.	<ul style="list-style-type: none"> • Geology and Soils • Hydrology and Water Quality
Action 1.4 Water Conservation and Disclosure Ordinance	Reduce daily per capita water consumption by 4 gallons by 2020 and 9 gallons by 2035.	See Action 1.3	See Action 1.3
Action 1.5 Outdoor Landscaping Ordinance	Reduce daily per capita water consumption by an additional 3 gallons by 2020 and an additional 5 gallons by 2035.	May require construction of new or expansion of existing water recycling facilities and infrastructure, including potential modifications to wastewater treatment plants, installation of recycled water delivery systems, monitoring systems, etc.	<ul style="list-style-type: none"> • Utilities and Service Systems • Air quality • Traffic and Transportation • Hydrology and Water Quality
Strategy 2: Clean & Renewable Energy			
Action 2.1 Community Choice Aggregation Program or <u>Another Similar Program</u>	Add additional renewable electricity supply to achieve 100 percent renewable electricity by 2035 city-wide including 19 percent net metered and shared solar by 2035	Would require the construction of distributed generation (small-scale renewables) on new and existing buildings, including solar photovoltaics, wind-turbines, and energy storage solutions. May directly or indirectly require the construction of large-scale renewable energy generation systems within or outside of the City to satisfy large demand. May therefore result in construction-related impacts (air quality, GHGs, traffic, noise), effects on visual quality (coastal views, hillsides, near open space areas, scenic highways); footprint effects associated with greenfield development, including biological, hydrologic, and cultural resources impacts.	<ul style="list-style-type: none"> • Air quality • GHGs • Traffic and Circulation • Visual Effects and Neighborhood Character • Biological Resources • Hydrology and Water Quality • Historical and Cultural Resources • Growth Inducement

TABLE 2-5 (Continued)
MATRIX OF CAP ACTIONS/POTENTIAL FOR ENVIRONMENTAL EFFECTS

CAP Strategies/Actions	Target	Potential Physical Changes to the Environment	Environmental Issue Areas Potentially Affected
Strategy 2: Clean & Renewable Energy (cont.)			
Action 2.2 Municipal Zero Emissions Vehicles	Increase the number of zero emissions vehicles in the municipal fleet to 50 percent by 2020 and 90 percent by 2035.	Generally minor construction-related effects (air quality, GHGs, traffic, noise, stormwater) within the built environment associated with development of electrical charging and other fueling infrastructure.	<ul style="list-style-type: none"> • Air quality • GHGs • Noise • Hydrology and Water Quality • Traffic and Circulation
Action 2.3 Convert Municipal Waste Collection Trucks to Low Emission Fuel	100 percent conversion from diesel fuel used by municipal solid waste collection trucks to compressed natural gas or other alternative low emission fuels by 2035.	Generally minor construction-related impacts (air quality, traffic, noise, stormwater) associated with development of electrical charging and other fueling infrastructure.	<ul style="list-style-type: none"> • Air quality • GHGs • Noise • Hydrology and Water Quality • Traffic and Circulation
Strategy 3: Bicycling, Walking, Transit & Land Use			
3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas	Achieve mass transit mode share of 12 percent by 2020 and 25 percent by 2035 in TPAs.	Development of new and extended mass transit infrastructure and service, resulting in construction-related impacts, change to land use and the character of the urban environment, and operational impacts.	<ul style="list-style-type: none"> • Air quality • GHGs • Noise • Hydrology and Water Quality • Traffic and Circulation • Land Use • Visual Impacts and Neighborhood Character • Historical and Cultural Resources • Biological Resources • Growth Inducement
3.2 Implement the City's Pedestrian Master Plan in Transit Priority Areas	Achieve walking commuter mode share of 3 percent by 2020 and 7 percent by 2035 in TPA.	Implementation of the City's Pedestrian Master Plan, including renovations and retrofits of existing sidewalks, cross-walks, and pedestrian trails as well of construction of new pedestrian facilities may result in short-term construction related impacts, and changes to circulation and to neighborhood character.	<ul style="list-style-type: none"> • Air quality • GHGs • Noise • Hydrology and Water Quality • Traffic and Circulation • Visual Resources and Neighborhood Character
3.3 Implement the City's Bicycle Master Plan	Achieve 6 percent bicycle commuter mode share by 2020 and 18 percent mode share by 2035 in TPAs.	Implementation of the City's Bicycle Master Plan, including renovations and retrofits of existing bike lanes and construction of new bike lanes and facilities, may result in short-term construction impacts and long-term effects on traffic and circulation and neighborhood character.	<ul style="list-style-type: none"> • Air quality • GHGs • Noise • Hydrology and Water Quality • Traffic and Circulation • Visual Resources and Neighborhood Character
3.4 Implement a Traffic Signal Master Plan	Retime 200 traffic signals by 2020.	Adjustment to programming of existing traffic signals	None.

TABLE 2-5 (Continued)
MATRIX OF CAP ACTIONS/POTENTIAL FOR ENVIRONMENTAL EFFECTS

CAP Strategies/Actions	Target	Potential Physical Changes to the Environment	Environmental Issue Areas Potentially Affected
Strategy 3: Bicycling, Walking, Transit & Land Use (cont.)			
3.5 Implement a Roundabouts Master Plan	Install roundabouts at 15 intersections by 2020 and an additional 20 intersections by 2035.	Short-term construction impacts, operational changes to traffic circulation. May affect visual resources and neighborhood character through introduction of change to streetscape.	<ul style="list-style-type: none"> • Air quality • GHGs • Noise • Hydrology and Water Quality • Traffic and Circulation • Visual Resources and Neighborhood Character
3.6 Implement Transit-Oriented Development within Transit Priority Areas	Reduce average vehicle commute distance by two miles through implementation of the General Plan City of Villages Strategy by 2035.	Implementation of City of Villages Strategy would result in new development at a higher density than existing development, especially near transit corridors. Short-term construction impacts and long-term changes to land use, traffic and circulation, visual resources and neighborhood character. Could affect historic resources.	<ul style="list-style-type: none"> • Land use • Air quality • GHGs • Noise • Hydrology and Water Quality • Traffic and Circulation • Visual Resources and Neighborhood Character • Historical and Cultural Resources
Strategy 4: Zero Waste			
Action 4.1 Divert Solid Waste and Capture Landfill Emissions	75 percent diversion by 2020 and 90 percent by 2035	Increasing waste diversion may require the construction of new or expansion of existing waste processing facilities, as well as new or expanded waste collection programs. May result in short-term construction impacts and long-term operational impacts, including increased truck traffic, noise, odors, air and GHG emissions.	<ul style="list-style-type: none"> • Air quality • GHGs • Noise • Hydrology and Water Quality • Traffic and Circulation • Visual Resources and Neighborhood Character
Action 4.2 Capture Methane from Wastewater Treatment	Capture 98 percent wastewater treatment gases by 2035.	New or expanded wastewater treatment facilities, such as anaerobic digesters, may result in short-term construction impacts and long-term impacts such as air emissions, GHGs, noise, traffic and circulation.	<ul style="list-style-type: none"> • Air quality • GHGs • Noise • Hydrology and Water Quality • Traffic and Circulation
Strategy 5: Climate Resiliency			
Action 5.1 Urban Tree Planting Program	Achieve 15 percent urban canopy cover by 2020 and 35 percent urban canopy cover by 2035	Shade trees planted along streets, in parking lots, and in other public spaces may result in increased demand for irrigation water and City services such as street sweeping. Mature trees may block existing views.	<ul style="list-style-type: none"> • Water supply • <u>GHGs</u> • Visual Resources and Neighborhood Character • Utilities and Service Systems

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CHAPTER 3

Environmental Setting, Impacts, and Mitigation Measures

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A. Land Use

A.1 Introduction

This section of the PEIR analyzes the potential environmental effects on land use/planning from implementation of the City of San Diego (City) Climate Action Plan (CAP).

A.2 Environmental Setting

Regional Land Use Patterns

The City of San Diego is the largest incorporated city in San Diego County and borders unincorporated areas of the County, a number of other cities and the U.S.-Mexico border. The County of San Diego identifies 23 community and subregional areas throughout the County. The City of San Diego serves as the primary employment center for the region, with many residents of surrounding cities commuting to areas within San Diego.

San Diego's southern most communities lie along the U.S.-Mexico border near the San Diego-Baja California point-of-entry, which is considered one of the busiest in North America. On the other side of the border is the City of Tijuana, the largest city in the Mexican state of Baja California. The Otay sub-region is located east of the City of San Diego's Otay Mesa community planning area and the City of Chula Vista near the U.S.-Mexico border. East Otay Mesa, one of two specific plan areas within the Otay sub-region, is a relatively flat mesa with mountains at the eastern edge and a major river valley and tributary canyon to the north. The predominant land uses in this area are industrial land uses, including distribution and warehouse uses.

North of the City of San Diego are the cities of Escondido and Poway, which include predominantly large-lot single-family residences and regional commercial, industrial, and office complexes. The County's San Dieguito Community Plan area is also located to the north and consists primarily of low-density estate residential uses. The City of San Diego is bordered to the northwest by the City of Del Mar and the City of Solana Beach. Del Mar and Solana Beach are coastal cities, which include older community cores located close to the beach surrounded by lower density residential development. In addition, the City of Coronado lies west of San Diego Bay. The San Diego-Coronado Bay Bridge, a two-mile long area landmark, connects the island of Coronado to the City of San Diego.

The City of Chula Vista is the second largest city in the County and is located in southern San Diego County, between National City and the southernmost portion of the City of San Diego. East of San Diego are the cities of Santee, El Cajon, La Mesa and Lemon Grove, which consist of older urban cores and well-established residential areas. The County's unincorporated community of Lakeside is also located to the east and includes primarily residential uses with a rural/suburban character. Two non-contiguous county islands exist within the City of San Diego. The Mira Mesa Island (Davis Ranch) is approximately 77 acres located within the Scripps Miramar Ranch

Community Plan area. Greenwood Island (Mount Hope Cemetery) is approximately 100 acres located in the Southeastern Community Plan area.

Existing Land Uses

The existing land uses within the City are described in Chapter 3.8, Land Use, of the Final Environmental Impact Report for the City's 2008 General Plan Update (General Plan PEIR). Additionally, relevant goals and policies are summarized in Chapter 3 of the General Plan PEIR. The detailed setting and policies provided in the General Plan PEIR are fully incorporated by these references.

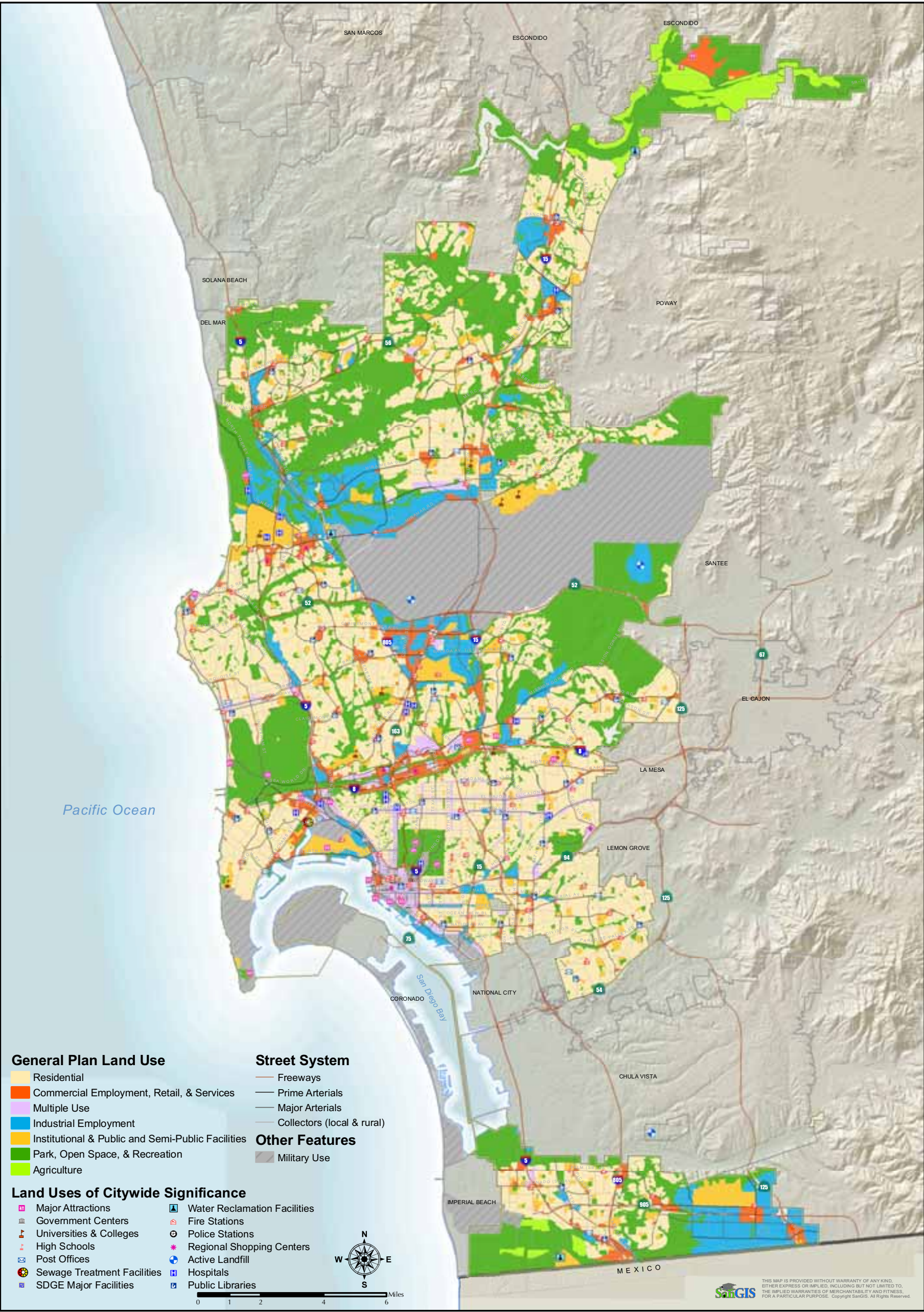
A summary of existing and planned land uses within the City are shown below in **Table 3.A-1** and in **Figure 3.A-1**. Much of the existing land use in the City is dedicated to Parks, Open Space, and Recreation as well as Residential land uses of varying densities, which combined amount to around 50 percent of the total land uses in the City. Institutional, Public and Semi-Public uses account for nearly 17 percent of the City's land use, and transportation related facilities account for 14 percent. Industrial Employment and Commercial Employment, Retail and Service uses account for a relatively small portion of land uses at four percent and 3.6 percent, respectively. Less than three percent of land is dedicated to Agriculture, and Vacant land accounts for 3.6 percent of the land area.

Under the City of San Diego General Plan (2008), all of the vacant land in the City would be developed. Agricultural, Commercial Employment, Retail, and Service uses and Institutional Public and Semi-Public Facilities would decrease in acreage. Much of this land would be converted to Multiple Use, Industrial Employment, Residential, and Park, Open Space, and Recreation uses.

**TABLE 3.A-1
EXISTING AND PLANNED LAND USE**

Land Use	Existing (2008)		Planned (2035)		Land Use Changes	
	Acres	Percent	Acres	Percent	Acres	Percent
Agriculture	6,055	2.8	3,670	1.7	(2,385)	-39.4
Commercial Employment, Retail, and Services	7,887	3.6	6,114	2.8	(1,773)	-22.5
Industrial Employment	8,928	4.1	12,278	5.6	3,350	37.5
Institutional, Public and Semi-Public Facilities	37,103	16.9	36,545	16.7	(558)	-1.5
Multiple Use	-	-	4,534	2.1	4,534	2.1
Park, Open Space, and Recreation	60,654	27.7	62,686	28.6	2,032	3.4
Residential	52,389	23.9	55,987	25.5	3,598	6.9
Roads/Freeways/Transportation Facilities	31,291	14.3	30,495	13.9	(796)	-2.5
Water Bodies	6,932	3.2	6,932	3.2	-	0.0
Vacant	8,002	3.6	-	-	(8,002)	-100.0
Total	219,241	100.0	219,241	100.0	-	NA

SOURCE: General Plan Final PEIR, 2007.



SOURCE: City of San Diego Draft General Plan Final PEIR, September 2007

San Diego CAP . 140651
Figure 3.A-1
General Plan Land Use

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A.3 Regulatory Setting

Federal

Federal Aviation Administration (FAA)

The authority of the Federal Aviation Administration (FAA) over proposed projects is defined in the Code of Federal Regulations Title 14 Chapter 1 Subchapter E Part 77 – Safe, Efficient Use, and Preservation of the Navigable Airspace (49 CFR Part 77). Any project that is proposed within or near an airport, as described in §77.9 Construction or Alteration Requiring Notice, is required to coordinate with the FAA to ensure the construction and operation of the proposed project is consistent with all FAA requirements.

State

Sustainable Communities and Climate Protection Act of 2008

Senate Bill (SB) 375 was enacted in 2008 and is formally referred to as “The Sustainable Communities and Climate Protection Act of 2008.” SB 375 relates to regional land use and transportation policies, with an emphasis on policies to reduce statewide GHG emissions. The law requires the State’s 18 metropolitan planning organizations to adopt sustainable community strategies that, if implemented, would help each region achieve their respective targets for reducing GHG emissions from automobiles and light trucks. The targets are established by the California Air Resources Board. SANDAG, San Diego’s metropolitan planning organization, adopted an updated Regional Transportation Plan and Sustainable Communities Strategy in October 2011 to address the requirements of SB 375.

Executive Order S-13-08

On November 14, 2008, Governor Schwarzenegger issued Executive Order S-13-08, the Climate Adaptation and Sea Level Rise Planning Directive, which provides clear direction for how the State should plan for future climate impacts. Executive Order S-13-08 calls for the implementation of four key actions to reduce the vulnerability of California to climate change:

- Initiate California’s first statewide Climate Change Adaptation Strategy (CAS) that will assess the state’s expected climate change impacts, identify where California is most vulnerable, and recommend climate adaptation policies
- Request that the National Academy of Sciences establish an expert panel to report on sea level rise impacts in California in order to inform State planning and development efforts
- Issue interim guidance to State agencies for how to plan for sea level rise in designated coastal and floodplain areas for new and existing projects
- Initiate studies on critical infrastructure and land-use policies vulnerable to sea level rise.

The 2009 CAS report summarizes the best known science on climate change impacts in the state to assess vulnerability, and outlines possible solutions that can be implemented within and across State agencies to promote resiliency. This is the first step in an ongoing, evolving process to reduce California's vulnerability to climate impacts (CNRA 2009).

California Code of Regulations (CCR) Title 24, Part 6

Title 24 CCR, Part 6 (California's Energy Efficiency Standards for Residential and Nonresidential Buildings) (Title 24) were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Although it was not originally intended to reduce greenhouse gas (GHG) emissions, electricity production by fossil fuels results in GHG emissions and energy efficient buildings require less electricity. Therefore, increased energy efficiency results in decreased GHG emissions. The most recent updates to Title 24 became effective on July 1, 2013.

California Coastal Act

The California Coastal Commission was established by voter initiative in 1972 (Proposition 20) and later made permanent by the Legislature through adoption of the California Coastal Act of 1976. The Coastal Commission, in partnership with coastal cities and counties, plans and regulates the use of land and water in the coastal zone. Development activities, which are broadly defined by the Coastal Act to include (among others) construction of buildings, divisions of land, and activities that change the intensity of use of land or public access to coastal waters, generally require a coastal permit from either the Coastal Commission or the local government.

The Coastal Act includes specific policies (see Division 20 of the Public Resources Code) that address issues such as shoreline public access and recreation, lower cost visitor accommodations, terrestrial and marine habitat protection, visual resources, landform alteration, agricultural lands, commercial fisheries, industrial uses, water quality, offshore oil and gas development, transportation, development design, power plants, ports, and public works. The policies of the Coastal Act constitute the statutory standards applied to planning and regulatory decisions made by the Commission and by local governments, pursuant to the Coastal Act.

Local Coastal Program

The City's Community Plans located within the State Coastal Zone Boundary must be certified by the California Coastal Commission (Coastal Commission) as being appropriate to implement the Coastal Act. The City of San Diego has the authority to issue Coastal Development Permits for areas of the Coastal Zone where the Coastal Commission has certified the Local Coastal Program (LCP). Other designations include appealable and nonappealable areas, in which a Coastal Development Permit may or may not be appealed to the Coastal Commission. In addition, there are deferred certification areas in which the Coastal Commission has not certified the City's land use plan and areas that are solely under the jurisdiction of the Coastal Commission, called areas of original jurisdiction.

The Coastal Zone Boundary encompasses much of the land west of Interstate 5 (I-5), as well as some land near State Route 56 (SR 56) to the north, and includes portions of the following communities: Barrio Logan, Carmel Valley, Del Mar Mesa, Downtown, La Jolla, Los Penasquitos Canyon, Midway-Pacific Highway, Mira Mesa, Mission Bay Park, Mission Beach, Ocean Beach, Pacific Beach, Peninsula, Torrey Hills, Tijuana River Valley, Torrey Pines, University, and Via De La Valle.

Regional

San Diego Association of Governments (SANDAG)

SANDAG is the region's metropolitan planning organization (MPO) and serves as a forum for public decision making on regional issues such as growth, transportation, and land use in the San Diego region and is comprised of representatives from each of San Diego County's local jurisdictions, including the City of San Diego. SANDAG programs such as the Regional Comprehensive Plan (RCP) and Regional Transportation Plan (RTP) are pertinent to the City of San Diego's General Plan efforts.

Regional Comprehensive Plan (RCP)

The RCP is the long-range planning document developed to address the region's housing, economic, transportation, environmental, and overall quality-of-life needs. The City of San Diego's General Plan is intended to complement this plan and encourage smart growth principles. Goals of the RCP are to establish a planning framework and implementation actions that increase the region's sustainability and encourage smart growth. The plan seeks to achieve sustainability through planning and development that meets economic, environmental, and community needs, without jeopardizing the ability of future generations to meet these needs. The RCP contains an incentive-based approach to encourage and channel growth into existing and future urban areas and smart growth communities. In May of 2012, the SANDAG board of directors voted to integrate the RCP with the development of the next RTP/SCS, with a target adoption date of July 2015.

SANDAG 2050 Regional Transportation Plan and Sustainable Communities Strategy

The 2050 Regional Transportation Plan/Sustainable Communities Strategy (2050 RTP/SCS), adopted by SANDAG in 2011, presents a transportation system designed to maximize transit enhancements, integrate biking and walking elements, and promote programs to reduce demand and increase efficiency (SANDAG 2011). One key theme of the RTP is to improve the connections between land use and transportation plans by using smart growth principles. The 2050 RTP includes a Sustainable Communities Strategy (SCS) that integrates land use planning, housing development, and transportation planning. The SCS also addresses how the transportation system is developed in such a way that the region reduces per-capita GHG emissions to State-mandated levels. The SCS includes a land use pattern that accommodates the region's future employment and housing needs, and protects sensitive habitats and resource areas. To accomplish this in a sustainable manner, the 2050 RTP/SCS land use pattern focuses housing and jobs growth in existing urbanized areas, protects about 1.3 million acres of land, and invests

in a transportation network that provides residents and workers with alternatives to driving alone. New development would be more compact and more accessible to public transit and other travel choices, such as walking and bicycling.

Local

San Diego General Plan

The City's General Plan, updated in 2008, sets out a long-range vision and comprehensive policy framework for how the City should grow and develop, provide public services, and maintain the qualities that define San Diego over the next 20 to 30 years. It provides a strategy, the City of Villages, for how the City can enhance its many communities and neighborhoods as growth occurs over time. The City of Villages strategy focuses growth into mixed use activity centers that are pedestrian-friendly districts linked to an improved regional transit system. The strategy draws upon the character and strengths of San Diego's natural environment, neighborhoods, commercial centers, institutions, and employment centers. The strategy is designed to sustain the long-term economic, environmental, and social health of the City and its many communities. It recognizes the value of San Diego's distinctive neighborhoods and open spaces that together form the City as a whole.

A "village" is defined as the mixed-use heart of a community where residential, commercial, employment, and civic uses are all present and integrated. Each village will be unique to the community in which it is located. All villages will be pedestrian-friendly and characterized by inviting, accessible and attractive streets and public spaces. Public spaces will vary from village to village, consisting of well-designed public parks or plazas that bring people together. Individual villages will offer a variety of housing types affordable for people with different incomes and needs. Over time, villages will connect to each other via an expanded regional transit system.

Community Plans, Precise Plans, and Specific Plans

The City has 55 distinct community plan areas. The community plan areas fall within seven community typologies which describe predominant architectural features and urban planning characteristics. The seven typologies include: Coastal, Downtown, Military/Environmental/Other Limited Development, Pre-World War II (Pre 1945), Post-World War II Suburban (1945-1970), Newer Urban 1960 to Present, and Master Planned Suburban (1970-Present). Each community planning area has its own land use plan that specifically addresses land use distribution and land use designations in more detail than is possible at the General Plan level. Community plans also provide policy for community facilities, urban design and other aspects of community planning as needed. The City is in the process of updating community plans to reflect the policy changes of the General Plan.

Within the community plan framework, precise plans and specific plans detail land use, public facility, and design issues on a smaller scale than community plans, which represent a broader policy scope. While precise plans are typically policy documents focused on a portion of a community plan area, specific plans can be a policy document or a combined policy and

regulatory document that is reflected in the Land Development Code (LDC) through implementation of LDC zones.

Relevant General Plan Policies

The following General Plan policies from the Land Use Element and Urban Design Element address GHG emissions and climate change:

- LU-A.1 Designate a hierarchy of village sites for citywide implementation.
- b. Encourage further intensification of employment uses throughout Subregional Employment Districts. Where Appropriate, consider collocating medium-to high-density residential uses with employment uses (see also Economic Prosperity Element).
 - d. Revitalize transit corridors through the application of plan designations and zoning that permits a higher intensity of mixed-use development, employment uses, commercial uses, and higher density-residential development.
- LU-A.2 Identify sites suitable for mixed-use village development that will complement existing community fabric or help achieve desired community character, with input from recognized community planning groups and the general public.
- LU-A.3 Identify and evaluate potential village sites considering the following physical characteristics:
- Shopping centers, districts, or corridors that could be enhanced or expanded;
 - Community or mixed-use centers that may have adjacent existing or planned residential neighborhoods;
 - Vacant or underutilized sites that are outside of open space or community-plan designated single-family residential areas;
 - Areas that have significant remaining development capacity based upon the adopted community plan; and
 - Areas that are not subject to major development limitations due to topographic, environmental, or other physical constraints.
- LU-A.4 Locate village sites where they can be served by existing or planned public facilities and services, including transit services.
- LU-A.5 Conduct environmental review and focused study during the community plan update process, of potential village locations, with input from recognized community planning groups and the general public, to determine if these locations are appropriate for mixed-use development and village design.
- LU-A.7 Determine the appropriate mix and densities, intensities of village land uses at the community plan level, or at the project level when adequate direction is not provided in the community plan.
- b. Achieve transit-supportive density and design, where such density can be adequately served by public facilities and services (see also Mobility Element, Policy ME-B.9). Due to the distinctive nature of each of the community planning areas, population density and building intensity will differ by each community.

- c. Evaluate the quality of existing and planned transit service.
- LU-A.8 Determine at the community plan level where commercial uses should be intensified within villages and other areas served by transit, and where commercial uses should be limited or converted to other uses.
- LU-A.10 Design infill projects along transit corridors to enhance or maintain a “Main Street” character through attention to site and building design, land use mix, housing opportunities, and streetscape improvements.
- LU-H.6 Provide linkages among employment sites, housing, and villages via an integrated transit system and a well-defined pedestrian and bicycle network.
- LU-I.11 Implement the City of Villages concept for mixed-use, transit-oriented development as a way to minimize the need to drive by increasing opportunities for individuals to live near where they work, offering a convenient mix of local goods and services, and providing access to high quality transit services.
- UD-A.1 Preserve and protect natural landforms and features.
 - a. Protect the integrity of community plan designated open spaces (see also Conservation Element, Policy CE-B.1).
 - b. Continue to implement the Multiple Species Conservation Program (MSCP) to conserve San Diego’s natural environment and create a linked open space system. Preserve and enhance remaining naturally occurring features such as wetlands, riparian zones, canyons, and ridge lines.
- UD-A.10 Design or retrofit streets to improve walkability, bicycling, and transit integration; to strengthen connectivity; and to enhance community identity. Streets are an important aspect of Urban Design as referenced in the Mobility Element (see also Mobility Element, Sections A, B, C, and F).
- UD-B.5d Emphasize the provision of high quality pedestrian and bikeway connections to transit stops/stations, village centers, and local schools.
- UD-C.1 In villages and transit corridors identified in community plans, provide a mix of uses that create vibrant, active places in villages.
 - a. Encourage both vertical (stacked) and horizontal (side-by-side) mixed-use development.
 - b. Achieve a mix of housing types, by pursuing innovative designs to meet the needs of a broad range of households.

Open Space and Landform Preservation

- CE-B.1 Protect and conserve the landforms, canyon lands, and open spaces that: define the City’s urban form; provide public views/vistas; serve as core biological areas and wildlife linkages; are wetlands habitats; provide buffers within and between communities; or provide outdoor recreational opportunities.
 - a. Utilize Environmental Growth Funds and pursue additional funding for the acquisition and management of MHPA and other important community open space lands. Support the preservation of rural lands and open spaces throughout the region.

- c. Protect urban canyons and other important community open spaces including those that have been designated in community plans for the many benefits they offer locally, and regionally as part of a collective citywide open space system (see also Recreation Element, Sections C and F; Urban Design Element, Section A).
- d. Minimize or avoid impacts to canyons and other environmentally sensitive lands, by relocating sewer infrastructure out of these areas where possible, minimizing construction of new sewer access roads into these areas, and redirecting of sewage discharge away from canyons and other environmentally sensitive lands.
- e. Encourage the removal of invasive plant species and the planting of native plants near open space preserves.
- f. Pursue formal dedication of existing and future open space areas throughout the City, especially in core biological resource areas of the City's adopted MSCP Subarea Plan.
- g. Require sensitive design, construction, relocation, and maintenance of trails to optimize public access and resource conservation.

CE-B.2 Apply the appropriate zoning and Environmentally Sensitive Lands (ESL) regulations to limit development of floodplains, sensitive biological areas including wetlands, steep hillsides, canyons, and coastal lands.

- a. Manage watersheds and regulate floodplains to reduce disruption of natural systems, including the flow of sand to the beaches. Where possible and practical, restore water filtration, flood and erosion control, biodiversity and sand replenishment benefits.
- b. limit grading and alterations of steep hillsides, cliffs and shoreline to prevent increased erosion and landform impacts.

Land Development Code

The City's Land Development Code (LDC) is found in Chapters 11-14 of the Municipal Code, and contains the City's planning, zoning, subdivision, and building regulations. Overlay zones are applied in conjunction with base zones to address certain issue areas. Three of the most important overlay zones are: the Community Plan Implementation Overlay Zone, the Airport Approach Overlay Zone, and the Airport Environs Overlay Zone. Overlay zones that correspond with the coastal zone include the Coastal Overlay Zone, Coastal Height Limit Overlay Zone, and the Sensitive Coastal Overlay Zone. The Land Development Code also contains the Environmentally Sensitive Lands (ESL) regulations and related Biology Guidelines, which establish regulations and guidance for development within environmentally sensitive lands.

The City also utilizes Planned District Ordinances which consist of 20 separate zoning codes that address land use and design that aim to protect unique community features. The LDC further contains general development regulations. The City's ESL regulations (ESLs) are intended to protect, preserve, and restore lands containing steep hillsides, sensitive biological resources, coastal beaches, sensitive coastal bluffs, or Special Flood Hazard Areas.

Natural Resource Plans

Parks and Open Space Plans

In addition to the General Plan and community plans, which contain guidelines for growth, development and land use, there are park master plans and natural resource management plans for special areas of the City, which contain environmental goals, policies, and recommendations for park and open space areas. Natural resource management plans are required as a condition of the implementing agreement with the wildlife agencies for the Multiple Species Conservation Program (MSCP), and contain area-specific management directives to address management issues at the site-specific level. Plans include:

- Balboa Park Master Plan (Adopted 1989 and Amended 1997), Balboa Park East Mesa Precise Plan (Adopted 1993), and Balboa Park Inspiration Point Precise Plan (Draft 1998), Balboa Park Central Mesa Appendix (1992)
- Mission Bay Park Master Plan Update and Design Guidelines (Adopted 1994 and Amended 2002) Mission Bay Natural Resource Management Plan (1990)
- Otay Valley Regional Park Concept Plan (Adopted 2001)
- San Diego River Park Master Plan (Adopted 2013)
- Sunset Cliffs Natural Park Master Plan (Adopted 2005)
- Famosa Slough Enhancement Plan (1993)
- First San Diego River Improvement Project Specific Plan (Adopted 1984)
- First San Diego River Natural Resource Management Plan (Adopted 2004)
- Los Peñasquitos Enhancement Plan and Program (October 1985), Los Peñasquitos Canyon Preserve Master Plan (Adopted 1998), and Los Peñasquitos Canyon Preserve Natural Resource Management Plan (Adopted 1998)
- Marian Bear Memorial Park Natural Resource Management Plan (Adopted 1994)
- San Dieguito River Regional Park (Adopted 1984) and San Dieguito River Park Concept Plan (1994)
- Tecolote Canyon Natural Park Master Plan (1982)
- Chollas Creek Enhancement Program (Adopted 2002)
- Mission Trails Regional Park Master Plan (Adopted 1985), Mission Trails Regional Park Plan Update and Design Guidelines (Adopted 1994 and Amended 2002)
- Torrey Pines City Park General Development Plan (2012)
- Black Mountain Open Space Park Natural Resource Management Plan (Adopted 2014)
- Tijuana River National Estuarine Research Reserve Comprehensive Management Plan (2010)

Regional Natural Community Conservation Planning (NCCP)

Jurisdictions within San Diego County have developed several multiple jurisdiction natural habitat planning and open space conservation programs in accordance with the California Department of Fish and Wildlife (CDFW) Natural Community Conservation Planning (NCCP) program. The NCCP program, enacted in 1991, was established to provide long-term, regional protection of native vegetation and wildlife diversity while allowing compatible land uses and appropriate development and growth.

Multiple Species Conservation Program (MSCP)

The MSCP is a comprehensive habitat conservation planning program for 582,243 acres in southwestern San Diego County. The MSCP is intended to preserve a network of habitat and open space to protect biodiversity and enhance the region's quality of life. Economic benefits of the MSCP include reducing constraints on future development and decreasing the costs of compliance with federal and State natural resource laws. The City of San Diego is one of 11 jurisdictions within the MSCP study area. The City has adopted a Subarea Plan and implementing agreement with the United States Fish and Wildlife Service (USFWS) and CDFW.

San Diego Multiple Species Subarea Plan and Biological Resource Guidelines (2012)

The City of San Diego MSCP Subarea Plan (City of San Diego 1997) has been prepared pursuant to the overall MSCP guidelines to address habitat conservation goals within the City boundaries. The City's Multi-Habitat Planning Area (MHPA) is approximately 56,831 acres with 52,727 acres of core biological resource areas and corridors targeted for conservation. As of December, 2015, a total of 49,965.74 acres (94.4 percent) has been conserved or obligated towards the planned 52,727-acre goal. **Figure 3.A-2** shows the MHPA.

Approximately 15,341 acres of the remaining 19,614 acres are obligated as open space in association with public open space referred to as "cornerstone lands" and open space approved as a part of approved private projects that has not yet been placed in a conservation easement or dedicated to the City. The remaining 4,273 acres (8 percent) of open space required to assemble the preserve will be acquired through future private conservation and public acquisition of open space. Within the City of San Diego, preservation efforts are focused on assembling the regional preserve, or MHPA, which includes large, contiguous, biologically significant areas and associated corridors. These areas are found throughout the City, with large, core areas near the northern, eastern and southern jurisdictional boundaries; however, the MHPA also includes north-south and east-west corridors in the heart of the City (e.g., San Diego River) as well as urban canyons.

San Diego International Airport Land Use Compatibility Plan

The San Diego County Regional Airport Authority (Authority) serves as the Airport Land Use Commission (ALUC) for San Diego County. The ALUC is responsible for adopting Airport Land Use Compatibility Plans (ALUCPs) for sixteen public-use and military airports in San Diego County. The ALUCP establishes areas of influence within which airport operations are likely to affect land uses or land uses could affect airport operations. Safety and noise criteria are identified in the ALUCP so that land use conflicts with airport operations are minimized. Prior to amending a general plan, a local agency must refer the proposed action to the ALUC (Pub. Util.

Code Sec. 21676 et seq.). County and city general plans must be consistent with the ALUCP (Government Code Section 65302.2).

Currently, there are five adopted ALUCPs in place within the City's land use jurisdiction that include the San Diego International Airport, MCAS Miramar, Brown Field Municipal Airport, and Montgomery Field Municipal Airport. Compatibility plans have not been prepared for Naval Air Station North Island or Naval Outlying Field Imperial Beach.

Air Installations Compatible Use Zones (AICUZ) Study

The federal government requires that the military develop AICUZ studies for military air installations. An AICUZ study establishes land use strategies and noise and safety recommendations to prevent the encroachment of incompatible land use from degrading the operational capability of military air installations. State law requires that the ALUCP be consistent with the AICUZ studies. Once updated plans are published, the Airport Authority, acting as ALUC, addresses the AICUZ study strategies and recommendations as part the ALUCP update for military installations within the county.

A.4 Impacts and Mitigation Measures

Significance Criteria

According to the City of San Diego's CEQA Significance Determination Thresholds (January 2011), the following questions provide guidance to determine potential significance for land use:

Would the proposal:

1. Require a deviation or variance, and the deviation or variance would in turn result in a physical impact on the environment?
2. Result in a conflict with the environmental goals, objectives and recommendations of the community plan in which it is located?
3. Conflict with the provisions of the City's Multiple Species Conservation Program Subarea Plan or other approved local, regional or State habitat conservation plan?
4. Physically divide an established community?
5. Result in land uses which are not compatible with an adopted airport Comprehensive Land Use Plan (CLUP)?

The Significance Determination Thresholds go on to state that a significant impact with regard to land use could occur if a project would result in any of the following:

- Inconsistency/conflict with the environmental goals, objectives, or guidelines of a community or general plan;
- Inconsistency/conflict with an adopted land use designation or intensity and indirect or secondary environmental impacts occur;



SOURCE: City of San Diego Draft General Plan Final PEIR, September 2007

San Diego CAP . 140651
Figure 3.A-2
Habitat Conservation Areas

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- Substantial incompatibility with an adopted plan;
- Development or conversion of General Plan or Community Plan designated open space or prime farmland to a more intensive land use;
- Incompatible uses as defined in an Airport Land Use Plan or inconsistency with an airport's ACLUP as adopted by the ALUC;
- Inconsistency/conflict with adopted environmental plans for an area; and/or,
- Significantly increase the base flood elevation for upstream properties, or construct in a Special Flood Hazard Area (SFHA) or floodplain/wetland buffer zone.

Impact Analysis

As indicated in Table 2-5 in Chapter 2, Project Description, the CAP strategies, actions, and supporting measures that could have an impact on land use include:

- **Action 2.1 Community Choice Aggregation Program or Similar Program.** Supporting measures and steps that implement this action could result in land use conflicts or inconsistencies related to the construction of large scale renewable energy generation, transmission, and storage systems.
- **Action 3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas.** This action would facilitate the implementation of The City of Villages strategy and the shift to greater emphasis on mass transit and other modes of transportation. This action could therefore result in changes to the urban environment that could be inconsistent or conflict with existing land uses and land use plans and policies.

Issue 1: Would implementation of the CAP conflict with applicable land use plans, policies or regulations of an agency with jurisdiction over the Project?

The CAP is a policy-level document that proposes strategies to reduce GHG emissions and is designed to mitigate adverse environmental impacts associated with global climate change. The CAP has been prepared to be consistent with the City's General Plan, other planning documents, and the Development Code. The CAP does not propose any site-specific projects or grant any entitlements for development, but rather proposes a set of strategies, actions, and supporting measures that are intended to add detail to and implement climate-related policies of the General Plan and other plans.

Action 2.1 provides for consideration of a community choice aggregation (CCA) program or other program to achieve a target of 100 percent renewable supply of electricity by 2035. The CAP does not propose to construct any site-specific renewable energy infrastructure projects; rather, Action 2.1 directs the City to consider adoption of a CCA program, or other program, to leverage its purchasing power for renewable sources of energy. This would include encouraging and facilitating the installation of distributed (small-scale) renewable energy systems for homes and businesses. It may also result in the need for large-scale generation, transmission, and storage systems to maintain a consistent energy supply. Large scale systems may be developed by the

City, or the City may enter into purchase agreements with owners of such facilities to supply renewable energy.

Small-scale renewable energy systems, such as residential and small commercial roof-top solar photovoltaic (PV), generally result in minimal environmental impacts and are exempt from analysis under CEQA if they are less than 500 square feet, pursuant to SB 226. They would not result in or require a change in land use designation and in general would not result in incompatibility with surrounding land uses. Smaller systems that are located in sensitive areas or where land uses are incompatible, such as in biologically sensitive areas or on or near historic buildings, would be subject to existing Land Development Code restrictions and regulations designed to protect these resources, thereby avoiding a significant land use conflict (see further discussion of potential conflicts with habitat conservation plans, in Issue 3, below).

Potential land use compatibility issues may, however, result from the development of larger renewable energy generation, transmission, and storage systems. Larger renewable energy systems that may be encouraged or facilitated by implementation of the CAP may include, but are not limited to, large-scale solar PV and solar thermal facilities; on- and off-shore wind turbines, tidal and water power systems, geothermal systems, hydropower systems; and biomass systems; as well as new or upgraded transmission lines, substations, and energy storage systems. In general, larger-scale renewable energy facilities would be located in industrial areas, industrial brownfields,¹ and near existing utility infrastructure. This would include areas designated in the General Plan for industrial uses, institutional, public, and semi-public facilities, and military uses. Land use compatibility conflicts would not generally be expected for facilities located in these areas. If a project were proposed on agricultural land, private land near residential uses, or open space, then land use compatibility conflicts could arise. This may occur, for example, with a proposed wind project on private lands on coastal bluffs or ridgelines. A project of this kind may be incompatible with existing land use and zoning designations, and may conflict with adjacent land uses, for example residential and open space uses. This could result in a significant impact.

Outside of the City limits, development of large-scale renewable energy facilities may occur on private or public lands. Such developments could be proposed for locations with General Plan or Zoning Code designations incompatible with facilities of this kind. In such cases, it would be the responsible of the agency with land use authority over the project site to ensure that such developments were compatible with existing designations or zoning, or to consider a variance or changing the designation or zoning to accommodate the project. Therefore, conflicts either would not occur, or would have to be resolved by the local agency. In either case, it is anticipated that conflicts with land use designations be considered in the planning and environmental review process for proposed facilities.

Action 3.1 prioritizes implementing the General Plan City of Villages Strategy in Transit Priority Areas (TPAs) identified in the 2050 San Diego Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The CAP would not change the land use designation of any

¹ Brownfields refer to land previously used for commercial or industrial purposes that is known to be or believed to be contaminated with hazardous waste or pollution.

land within the planning area; however, the CAP may indirectly influence land use decisions through this action, by establishing policies and programs to concentrate development and related infrastructure within the TPAs.

The RTP/SCS forecasts population and employment growth in the region and establishes a regional plan for future land use and transportation system improvements that would reduce GHG emissions from passenger vehicles and light trucks. The CAP does not propose large-scale transportation improvements; rather, the CAP quantifies the GHG reduction potential of locating future growth within TPAs, which are centered on the transportation and transit system improvements planned for in the RTP/SCS. The CAP supports the land use strategy in the RTP/SCS by encouraging community plans to direct growth within TPAs.

The General Plan's City of Villages strategy provides an overarching land use strategy for San Diego that is implemented through individual community land use plans. As described in General Plan policy LU-A.1, the City of Villages strategy encourages the intensification of employment uses in subregional employment districts, increases residential and commercial density near transit corridors, and encourages mixed-use development.

Because TPAs are located in proximity to key transportation corridors and transit routes, a land use conflict could occur if villages were located within TPAs near existing uses that could be affected by increased development density, such as land within an airport zone, adjacent to open space or other protected natural resources, or in areas that are designated for very low-density residential or agricultural uses.

Localized land use conflicts would be examined through implementation of General Plan policy LU.A-5, which requires that environmental review of potential village locations during the community update process "with input from recognized community planning groups and the general public, to determine if these locations are appropriate for mixed-use development and village design." Prior to adoption, every community plan would undergo environmental review to analyze the potential for local impacts due to land use changes in TPAs. In addition, implementation of the City of Villages strategy is accommodated through application of the City's Urban Village Overlay Zone, pursuant to §132.1101 et seq. of the Land Development Code, which is intended to create a mix of land uses in a compact pattern that will reduce dependency on the automobile, improve air quality, and promote high quality, interactive neighborhoods, as specified in Action 3.1. Much of the development called for in the CAP would occur within this overlay zone.

Future land use changes and any large-scale renewable energy projects proposed to implement the CAP would undergo further CEQA analysis to identify project-specific impacts, to identify feasible mitigation measures, and to consider alternatives, and to provide for public review and comment, prior to approval of any plan or project. Through the CEQA process, the compatibility of surrounding land uses and applicability of all land use plans would be reviewed to determine land use impacts that would result from the project. The City would review future proposed plans and projects for consistency with the policies in the General Plan, community plans, and the Zoning Code. The San Diego County Regional Airport Authority (Authority), acting as the Airport Land Use Commission (ALUC), would review future proposed land use plans and

policies for all community plan updates for consistency with airport land use compatibility plans and the military air installations compatible use zone studies for consistency with applicable land use regulations. The Coastal Commission would also review all proposed community land use plans for compatibility with the Coastal Zone regulations.

Significance of Impact

As described above, implementation of the CAP would generally be consistent with all applicable land use plans, policies, and regulations of agencies with jurisdiction over the Project, and would not conflict with any land use plans. Some projects undertaken pursuant to the CAP or in support of CAP programs, particularly the development of large-scale renewable energy facilities within the City limits, could conflict with existing land use and zoning designations or could conflict with adjacent land uses. This could result in a significant land use impact.

Mitigation Framework

Mitigation Measure LU-1: Siting of Large-scale Renewable Energy Projects.

To ensure that large-scale renewable energy projects are compatible and not in conflict with existing land use and zoning designations, and that any such facilities do not result in conflicts with adjacent land uses, the City shall develop a set of siting guidelines for such facilities prior to permitting any large-scale renewable energy projects. The guidelines shall avoid land use conflicts and contain specific provisions for appropriate siting of large renewable energy facilities to include all of the following at a minimum:

- A definition of the type and scale of facility that is subject to the siting guidelines. This list may be revised from time to time, as new technologies emerge and evolve.
- A matrix table that shows, for each type of facility, the appropriate land use and zoning designations, where siting of facilities would not be expected to cause a significant land use conflict.
- Guidelines or best management practices for minimizing conflicts with neighboring land uses. These would include, but not be limited to, required and recommended siting criteria; general design guidelines (such as property line setbacks); minimizing construction and operational noise (such as adherence to Noise Ordinance standards and General Plan compatibility standards); minimizing electromagnetic frequency (EMF) exposure; ~~and~~ minimizing visual prominence (for example, by avoiding siting of facilities on ridgelines and other prominent topographical features, or by providing vegetative screens); and minimizing lighting and glare effects (such as adherence to the City's Outdoor Lighting Regulations).
- The requirement that a facility demonstrate that there are no sensitive biological resources present on-site that would be impacted by development of the proposed large-scale renewable energy facility, or demonstrate compliance with the MSCP Subarea Plan Section 1.4.3, Land Use Adjacency Guidelines, and with the City's ESL Regulations.
- The requirement that a facility demonstrate that there are no historical resources present on-site that would be impacted by development of the proposed large-scale renewable energy facility, or demonstrate compliance with Mitigation Framework HIST-1.

- A checklist to determine whether, even with adherence to the guidelines provided, a facility may still result in a land use conflict.

Significance after Mitigation

With implementation of Mitigation Measure LU-1, potentially significant land use conflicts from siting of large-scale renewable energy facilities would be avoided. In the case where projects are found to have the potential for conflicts, additional environmental review would be required to determine the significance of impacts, the potential for mitigating impacts, and to consider project alternatives that may reduce or avoid impacts. After mitigation, this impact would be less than significant. The physical impacts that could result from land use conflicts may be significant and unavoidable and those impacts are analyzed in Sections 3.B (Visual Effects and Neighborhood Quality), 3.C (Air Quality), and 3.F (Transportation and Circulation).

Issue 2: Would implementation of the CAP conflict with the environmental goals, objectives, or recommendations of the General Plan or affected community plans?

As discussed in Chapter 1, Introduction and Environmental Setting, the General Plan, adopted in 2008, is the framework for the City's commitment to long-term conservation, sustainable growth, and resource management. It addresses GHG emission reductions through its City of Villages growth strategy and a wide range of inter-disciplinary policies. The General Plan contains Policy CE-A.2:

Reduce the City's carbon footprint. Develop and adopt new or amended regulations, programs, and incentives as appropriate to implement the goals and policies set forth in the General Plan to:

- Create sustainable and efficient land use patterns to reduce vehicular trips and preserve open space;
- Reduce fuel emission levels by encouraging alternative modes of transportation and increasing fuel efficiency;
- Improve energy efficiency, especially in the transportation sector and buildings and appliances;
- Reduce the Urban Heat Island effect through sustainable design and building practices, as well as planting trees (consistent with habitat and water conservation policies) for their many environmental benefits, including natural carbon sequestration;
- Reduce waste by improving management and recycling programs; and
- Plan for water supply and emergency reserves.

In general, the CAP would be consistent with this policy as it would further its implementation, since it contains strategies, actions, and supporting measures aimed at each of the specific points contained in the policy. Specifically, CAP Action 3.1, which implements the City of Villages land use strategy, is consistent with Policy CE-A.2, since it facilitates the concentration of future development in the TPAs.

At the time that the General Plan was adopted, the City had already adopted its Climate Protection Action Plan (CPAP). The CPAP was approved in 2005, and focused on reducing emissions from municipal operations. The General Plan contains Policy CE-A.13, which lays out the requirements for updating, expanding, and implementing the CPAP:

Regularly monitor, update, and implement the City's Climate Protection Action Plan, to ensure, at a minimum, compliance with all applicable federal, State, and local laws.

- a. Inventory greenhouse gas emissions, including emissions for the City community-at-large, and for the City as an organization.
- b. Identify actions and programs designed to reduce the climate change impacts caused by the community-at-large and the City as an organization.

The CAP would implement Policy CE-A.13, since it updates the City's Climate Protection Action Plan to be consistent with current federal, State, and local laws; provides a new community GHG inventory, and identifies actions and programs to reduce GHG emissions and increase community resiliency to climate change.

Chapter 3 of the CAP indicates the General Plan policies that support each CAP strategy.

Table 3.A-2 relates these General Plan policies to the proposed CAP actions. As shown in the table, each proposed CAP action is consistent with several General Plan policies. The Table also provides an indication of how each CAP action is consistent with other adopted environmental plans and policies. As shown in Table 3.A-2, the CAP would implement and be consistent with many of the environmental policies in the General Plan and community plans. For example, Strategy 3 and its related actions would facilitate implementation of the General Plan's City of Villages strategy and community plans that provide neighborhood-level planning for the City of Villages strategy. Actions 2.1 and 2.2 in the CAP would implement General Plan policies which prioritize the development of sustainable energy (policies CE-I.2, CE-I.3, CE-I.5, CE-I.10, and CE-I.11). Actions 1.3, 1.4, and 1.5 would implement General Plan policies to reduce water demand (policies PF-H.1 and CE-D.1-4). Action 4.1 would implement General Plan policy to divert solid waste from landfills and extend the useful life of existing landfills (policy PF-I.2), and Action 5.1 would implement General Plan policies to plant shade trees and expand the City's urban tree canopy (policies CE-J.1 and CE-J.4).

With regard to the community plans, as noted in the Regulatory Setting section above, each community planning area has its own land use plan that specifically addresses land use distribution and land use designations in more detail than is possible at the General Plan level. Community plans also provide policy for community facilities, urban design and other aspects of community planning. The City is in the process of updating community plans to reflect the policy changes of the General Plan, particularly to add specificity to the City of Villages strategy. The CAP strategies and actions are intended to support and facilitate implementation of the community plans that have already been updated to incorporate the City of Villages strategy. As noted in the General Plan PEIR, Chapter 3.8, Land Use, until all of the community plans have been updated to reflect and incorporate the City of Villages strategy, there may be conflicts between the policies contained in the older community plans and the General Plan.

**TABLE 3.A-2
MATRIX OF CAP ACTIONS/PLAN CONSISTENCY**

CAP Strategies/Actions	Target	GP Supporting Policies	Other Relevant Plans and Plan Policies
Strategy 1: Water & Energy Efficient Buildings			
Action 1.1 Residential Energy Conservation and Disclosure Ordinance	Reduce energy use by 15 percent per unit in 20 percent of residential housing units by 2020 and 50 percent of units by 2035.	<ul style="list-style-type: none"> CE-I.7 Energy Efficiency Investments CE-I.5b Renewable Energy Installation for New and Existing Buildings CE-I.13 Energy Conservation Education 	<ul style="list-style-type: none"> Proposition D - height limitations west of I-5 for solar rooftop installations San Diego Regional Air Quality Strategy (RAQS) - emissions exceedances possible during construction of retrofits San Diego Historical Resources Guidelines - retrofit alterations to historic buildings Senate Bill 226 – exemption for rooftop solar
Action 1.2: City of San Diego's Municipal Energy Strategy and Implementation Plan	Reduce energy consumption at municipal facilities by 15 percent by 2020 and an additional 25 percent by 2035.	<ul style="list-style-type: none"> CE-I.7 Energy Efficiency Investments CE-I.5b Renewable Energy Installation for New and Existing Buildings CE-I.4 Water Conservation and Waste Diversion 	<ul style="list-style-type: none"> San Diego Regional Air Quality Strategy (RAQS) - emissions exceedances possible during construction of retrofits San Diego Historical Resources Guidelines - retrofit alterations to historic buildings Senate Bill 226– exemption for rooftop solar
Action 1.3 New Water Rate and Billing Structure	Reduce daily per capita water consumption by four gallons by 2020 and nine gallons by 2035 from a potential new water rate billing structure	<ul style="list-style-type: none"> CE-A.11h Implement Water Conservation Measures CE-D.1h Water Conservation Incentives CE-D.1i Water Shortage Response Plan CE-D.1j Conservation Enforcement CE-D.1m Water Conservation Education CE-I.4 Water Conservation and Waste Diversion 	<ul style="list-style-type: none"> City of San Diego Urban Water Management Plan (UWMP) - for implementing water conservation measures San Diego County Water Authority UWMP- for implementing water conservation measures San Diego Integrated Water Management Plan (IRWMP) – for reduction in use of groundwater or any alteration of groundwater resources
Action 1.4 Water Conservation, Disclosure, and Benchmarking Ordinance	Reduce daily per capita water consumption by four gallons by 2020 and nine gallons by 2035.	<ul style="list-style-type: none"> CE-A.11h Implement Water Conservation Measures CE-D.1j Conservation Enforcement CE-D.1k Water Conservation Technology CE-D.1l Update Landscaping Regulations CE-D.1m Water Conservation Education CE-I.4 Water Conservation and Waste Diversion 	<ul style="list-style-type: none"> City of San Diego Urban Water Management Plan (UWMP) - for implementing water conservation measures San Diego County Water Authority UWMP- for implementing water conservation measures San Diego Integrated Water Management Plan (IRWMP) – for reduction in use of groundwater or any alteration of groundwater resources
Action 1.5: Outdoor Landscaping Ordinance	Reduce daily per capita water consumption by an additional three gallons by 2020 and an additional five gallons by 2035.	<ul style="list-style-type: none"> CE-A.11e Lawn Replacement CE-A.11h Implement Water Conservation Measures CE-A.11i Reduce Potable Water Use for Irrigation CE-D.1i Water Shortage Response Plan CE-D.1k Water Conservation Technology CE-D.1l Update Landscaping Regulations CE-D.1m Water Conservation Education CE-I.4 Water Conservation and Waste Diversion 	<ul style="list-style-type: none"> City of San Diego Urban Water Management Plan (UWMP) - for implementing water conservation measures San Diego County Water Authority UWMP- for implementing water conservation measures San Diego Integrated Water Management Plan (IRWMP) – for reduction in use of groundwater or any alteration of groundwater resources

TABLE 3.A-2 (Continued)
MATRIX OF CAP ACTIONS/ PLAN CONSISTENCY

CAP Strategies/Actions	Target	GP Supporting Policies	Other Relevant Plans and Plan Policies
Strategy 2: Clean & Renewable Energy			
Action 2.1 Community Choice Aggregation Program or <u>Another Similar Program</u>	Add additional renewable electricity supply to achieve 100 percent renewable electricity by 2035 city-wide including 19 percent net metered and shared solar by 2035	<ul style="list-style-type: none"> • CE-I.5 Photovoltaic/ Renewables Installation • CE-I.10 Renewable Energy Procurement • CE-I.11 Renewable Energy Incentives • CE-A.5 Sustainable Buildings/ Renewables • CE-A.6 Renewables on City Buildings • UD-A.4 Sustainable Buildings/ Renewables 	<ul style="list-style-type: none"> • Land Development Code – renewable systems must comply with LDC • City's Various Parks, Open Space, and Natural Resource Plans – may be effected due to siting of renewable systems • SD County MSCP Subarea Plan – renewable system installation may affect lands within or in proximity to the MSCP Subarea • Biological Resource Guidelines – system installation must comply with guidelines • Environmentally Sensitive Lands (ESLs) Regulations – system installation must comply with regulations • Airport Land Use Commission (ALUC) for San Diego County – systems installed within or in proximity to ALUC plan must be consistent • Air Installations Compatible Use Zones (AICUZ) Studies– systems installed within or in proximity to AICUZ areas must be consistent • Caltrans Scenic Highway Program – installation of systems may affect views along scenic highways • San Diego Regional Air Quality Strategy (RAQS) - emissions exceedances possible during construction of systems • Regional Energy Strategy (RES) 2030 – is this goal consistent with the RES? Does RES support or can County support such significant increases in renewables? • Senate Bill 226– exemption for rooftop solar
Action 2.2 Municipal Zero Emissions Vehicles	Increase the number of zero emissions vehicles in the municipal fleet to 50 percent by 2020 and 90 percent by 2035.	<ul style="list-style-type: none"> • CE-A.2 Reduce City's Carbon Footprint 	<ul style="list-style-type: none"> • None
Action 2.3 Convert Municipal Waste Collection Trucks to Low Emission Fuel	100 percent conversion from diesel fuel used by municipal solid waste collection trucks to compressed natural gas or other alternative low emission fuels by 2035.	<ul style="list-style-type: none"> • CE-A.2 Reduce City's Carbon Footprint 	<ul style="list-style-type: none"> • None

TABLE 3.A-2 (Continued)
MATRIX OF CAP ACTIONS/ PLAN CONSISTENCY

CAP Strategies/Actions	Target	GP Supporting Policies	Other Relevant Plans and Plan Policies
Strategy 3: Bicycling, Walking, Transit & Land Use			
Action 3.1 Mass Transit	Achieve mass transit mode share of 12 percent by 2020 and 25 percent by 2035 in Transit Priority Areas (TPA).	<ul style="list-style-type: none"> • CE-F.1 Reduce Fossil Fuel Use • ME-E.6 Alternative Modes of Transportation for New Development • ME-B.9 Transit Planning • LU-A.7 Increased/ Transit Supportive Density 	<ul style="list-style-type: none"> • Land Development Code – renewable systems must comply with LDC • San Diego Regional Air Quality Strategy (RAQS) - emissions exceedances possible during construction of systems • SANDAG RTP/SCS – TPA development must support goals of RTP/SCS
Action 3.2: Commuter Walking	Achieve walking commuter mode share of three percent by 2020 and seven percent by 2035 in TPA.	<ul style="list-style-type: none"> • CE-A.2 Reduce City's Carbon Footprint • ME-E.6 Alternative Modes of Transportation for New Development • ME-B.9 Transit Planning • ME-C.4 Street and Sidewalk Operations 	<ul style="list-style-type: none"> • San Diego Regional Air Quality Strategy (RAQS) - emissions exceedances possible during construction of systems • San Diego Pedestrian Master Plan – would be implemented under this action
Action 3.3 Commuter Bicycling	Achieve six percent bicycle commuter mode share by 2020 and 18 percent mode share by 2035 in Transit Priority Areas.	<ul style="list-style-type: none"> • CE-A.2 Reduce City's Carbon Footprint • ME-E.6 Alternative Modes of Transportation for New Development • ME-F.5 Increase Bicycle to Transit Trips • ME-F.6 Bicycle Safety Education • ME-C.4 Street and Sidewalk Operations 	<ul style="list-style-type: none"> • San Diego Regional Air Quality Strategy (RAQS) - emissions exceedances possible during construction of systems • San Diego Bicycle Master Plan – would be implemented under this action
Action 3.4 Retiming Traffic Signals	Retime 200 traffic signals by 2020.	<ul style="list-style-type: none"> • CE-A.2 Reduce City's Carbon Footprint • CE-F.1 Reduce Fossil Fuel Use • CE-F.5 Reduce Emissions from Motors • ME-C.4 Street and Sidewalk Operations 	<ul style="list-style-type: none"> • None
Action 3.5 Install Roundabouts	Install roundabouts at 15 intersections by 2020 and an additional 20 intersections by 2035.	<ul style="list-style-type: none"> • CE-A.2 Reduce City's Carbon Footprint • CE-F.1 Reduce Fossil Fuel Use • ME-C.4 Street and Sidewalk Operations 	<ul style="list-style-type: none"> • San Diego Regional Air Quality Strategy (RAQS) during retrofit construction
Action 3.6 Reduction in Commute Miles	Reduce average vehicle commute distance by two miles through implementation of the General Plan City of Villages Strategy by 2035.	<ul style="list-style-type: none"> • CE-A.2 Reduce City's Carbon Footprint • CE-F.1 Reduce Fossil Fuel Use • ME-E.6 Alternative Modes of Transportation for New Development • ME-F.5 Increase Bicycle to Transit Trips • ME-B.9 Transit Planning • LU-A.7 Increased/ Transit Supportive Density 	<ul style="list-style-type: none"> • Land Development Code • City Natural Resource Plans • SD County MSCP Subarea Plan and Biological Resource Guidelines • San Diego Regional Air Quality Strategy (RAQS) during construction • San Diego Historical Resources Guidelines with increased density • SANDAG RTP/SCS

TABLE 3.A-2 (Continued)
MATRIX OF CAP ACTIONS/ PLAN CONSISTENCY

CAP Strategies/Actions	Target	GP Supporting Policies	Other Relevant Plans and Plan Policies
Strategy 4: Zero Waste			
Action 4.1 Divert Solid Waste and Capture Landfill Emissions	75 percent diversion by 2020 and 90 percent by 2035	<ul style="list-style-type: none"> • CE-A.2 Reduce City's Carbon Footprint • CE-A.8 Reduce C&D Waste • CE-A.9 Reduce C&D Waste • CE-E.6 Pollution Control • CE-M.3 International Pollution Control Coordination • CE-N.4 Reduce Energy Waste • CE-N.7 Waste Diversion Education • PF-I.1 Waste Collection Efficiency • PF-I.2 Waste Diversion 	<ul style="list-style-type: none"> • San Diego Regional Air Quality Strategy (RAQS) during retrofit or new facility construction, Construction and Demolition Debris Ordinance • ARB Landfill Methane Control Regulation • AB 939 and amendments and required planning documents.
Action 4.2 Capture Methane from Wastewater Treatment	Capture 98 percent wastewater treatment gases by 2035.	<ul style="list-style-type: none"> • CE-A.2 Reduce City's Carbon Footprint 	<ul style="list-style-type: none"> • San Diego Regional Air Quality Strategy (RAQS) during retrofit construction
Strategy 5: Climate Resiliency			
Action 5.1 Urban Tree Planting Program	Achieve 15 percent urban canopy cover by 2020 and 35 percent urban canopy cover by 2035	<ul style="list-style-type: none"> • CE-A.2 Reduce City's Carbon Footprint • CE-J.1 Urban Forestry • CE-J.2 Street Tree Master Plan • CE-J.3 Street Tree Master Plan Development 	<ul style="list-style-type: none"> • City of San Diego Urban Water Management Plan (UWMP) – would this result in a significant increase in demand for water that City cannot supply?

Significance of Impact

As described above, implementation of the CAP would not conflict with the environmental goals, objectives, or recommendations of the General Plan; rather, the CAP is consistent with implements the environmental goals, policies, and recommendations of the General Plan. Therefore, this impact is less than significant.

Mitigation Framework

No mitigation is required.

Issue 3: Would implementation of the CAP result in a conflict with an adopted environmental plan or other approved local, regional or State habitat conservation plan?

As described above, the applicable habitat conservation plan within the City is the MSCP Subarea Plan. Other adopted environmental regulations include the City's Environmentally Sensitive Lands (ESL) ordinance, a part of the City's Land Development Code, and the related Biology Guidelines.

The City's MSCP Subarea Plan identifies Park, Opens Space, and Recreation uses in the General Plan that are protected from development through implementation of the Subarea Plan Land Use Considerations (Section 1.4.1 to 1.4.3). The ESL Ordinance applies to all sensitive biological resources as well as environmentally sensitive lands, including steep hillsides, beaches, coastal bluffs, and special flood hazard areas.

Action 2.1 of the CAP could indirectly result in the construction of large-scale renewable energy generation, transmission, and storage systems, in order to support achievement of the CAP goal to supply 100 percent renewable energy to the City's power grid by the year 2035. It is anticipated that within the City limits, the majority of these systems would be located outside of biologically sensitive lands, with favored locations in industrial and commercial areas, such as roof tops, industrial brownfields, and parking lots. There is the potential, however, for development of renewable energy facilities in undeveloped areas and more sensitive areas, both within and outside the City limits.

Within the City limits, any such development would be subject to the restrictions and requirements of the MSCP Subarea Plan, ESL ordinance, and the Biology Guidelines. Such projects would be required to comply with the MSCP Land Use Adjacency Guidelines, which require all projects to ensure that site drainage is not directed directly into MSCP lands, measures are incorporated to reduce potential for chemicals to enter the MHPA lands, lighting is directed away from MHPA lands and buffered by landscaping where possible, noises are minimized and excessive noise during the breeding season is curtailed, and barriers are constructed along new development to protect MHPA lands from the public. Any renewable energy project proposed to support the goals of the CAP would be subject to the ESL Ordinance, Section 143.0101 et seq. of the Land Development Code, which would reduce impacts to these areas. Therefore, conflicts or inconsistencies with these plans are not expected to occur within the City.

Outside of the City limits, development of large-scale renewable energy facilities may occur on private or public lands. Such developments could be proposed for locations within the boundaries of adopted habitat conservation plans or other environmental plans. In such cases, it would be the responsible of the agency with land use authority over the project site to ensure that such developments were compatible with the requirements of any such plans. Therefore, conflicts either would not occur, or would have to be resolved by the local agency. In either case, it is anticipated that any impacts on sensitive biological resources would be identified and mitigated through the planning process for proposed facilities.

CAP Action 3.1 would facilitate the implementation of the General Plan City of Villages land use strategy, through supporting measures that encouraging new development within TPAs, prioritizing infrastructure improvements in TPAs, and implementing bicycle and pedestrian facilities improvements. More site-specific planning for TPAs is contained in the community plans, or will be added to community plans that have not yet been updated to reflect the City of Villages strategy.

The TPAs are generally urbanized areas centered on existing transit corridors. Action 3.1 would not in itself result in any changes to any environmentally sensitive lands. Action 3.1 could result in or facilitate changes to land uses or construction of new developments and transportation facilities in proximity to the MHPA or other environmentally sensitive lands. As with all developments within the City, such projects would be subject to the restrictions and requirements of the regulations contained in the MSCP Subarea Plan, the ESL Ordinance, and the Biology Guidelines. For these reasons, adoption and implementation of the CAP would not be expected to conflict with any local, regional, or State habitat conservation plan. The impact is, therefore, less than significant.

Significance of Impact

For the reasons stated above, the project is not expected to conflict with an adopted environmental plan or other approved local, regional or State habitat conservation plan. This impact is therefore less than significant.

Mitigation Framework

No mitigation is required.

B. Visual Effects and Neighborhood Character

B.1 Introduction

This section of the PEIR analyzes the potential environmental effects on visual resources and neighborhood character from implementation of the City of San Diego (City) Draft Climate Action Plan (CAP).

B.2 Environmental Setting

Regional Setting

The San Diego region is a visually diverse region rich in natural open space, topographic resources, scenic highways, scenic vistas, and other distinct aesthetic resources. San Diego's location bordering the Pacific Ocean also contributes to the natural setting of the region. The topography of the region contributes greatly to the overall character and quality of the existing visual setting. In general terms, the region is characterized by four physiographic regions: the low-lying coastal plain, the foothills, the mountains, and the lowlands of the desert. The visual character of each is described briefly below.

The coastal plain ranges in elevation from sea level to approximately 600 feet above mean sea level (AMSL) and includes beaches; bays; shoreline; coastal canyons; and the rivers, streams, and other watercourses that drain inland areas, eventually reaching the coastal environment and waters. The coastal plain provides expansive views of scenic resources in all directions, with the coastline visible from regional transportation facilities including the Los Angeles to San Diego (LOSSAN) rail corridor and Interstate 5 (I-5). Much of the coastal plain is developed with urban land uses. Agricultural uses within the coastal area include row crops, field flowers, and greenhouses.

The foothills of the San Diego region range in elevation from 600 to 2,000 feet AMSL and are characterized by rolling to hilly uplands that contain frequent narrow, winding valleys. This area is traversed by several rivers, as well as a number of intermittent drainages. Several side canyons have incised the coastal plan and created major drainages that generally flow westward toward the coast. These major drainages are the San Dieguito River Valley, Los Peñasquitos Creek, Carroll Creek, Rose Creek, San Diego River, Las Chollas Creek, Sweetwater River, Otay River, and the westernmost mouth of the Tijuana River. The foothills are also developed with various urban and rural land uses. Agriculture consists of citrus and avocado orchards as well as row crops.

The mountain region features steep-sided mountains that are typically covered with granitic boulders. Lower slopes feature chaparral vegetation. Higher elevations are host to oak woodlands and coniferous forest. Elevations range from 2,000 to 6,000 feet AMSL. The mountain areas are generally undeveloped with rural communities scattered throughout such as Alpine, Pine Valley, Campo, Ramona, and Julian.

The eastern portion of the San Diego region is within the desert zone. Elevations range from sea level to 3,000 feet AMSL and the terrain includes mountains, alluvial fans, and desert floor. The majority of this region is part of the Anza-Borrego Desert State Park. The desert region is generally undeveloped and sparsely populated in scattered towns such as the community of Borrego Springs. The desert region provides expansive views of the surrounding area, which is characterized by dramatic landforms and native desert habitats.

Throughout the coastal plain, foothills, mountains, and desert are vast amounts of publicly owned lands that provide open space and visual relief from the human-made environment. These include Marine Corps Base Camp Pendleton (MCBCP) on the coastal plain in northern San Diego region, the Cleveland National Forest in the Peninsular Range; and the Anza-Borrego Desert State park in the desert region. In addition to these examples of large expanses of open space, State, county, and local parks; habitat preserves; reservoirs; farmland; and undeveloped land lend to San Diego region's open space lands and overall aesthetic resource value.

Scenic Highways

The California Scenic Highways Program is run by Caltrans and is intended to protect and enhance the natural scenic beauty of California's highways and adjacent corridors, through special conservation treatment. State Route 163 (SR-163) through Balboa Park, State Route 75 (SR-75) at the Silver Strand, and State Route 125 (SR-125) from State Route 94 (SR-94) to Interstate 8 (I-8) are the three transportation corridors in the region that are designated as State Scenic Highways; only SR-163 is completely within city limits.

Scenic Views and Vistas

The coastal plain and foothills each contain numerous scenic resources and significant landscape features that contribute to the City's overall scenic quality. Major scenic resources within the coastal areas include views of the Pacific Ocean, beaches, bays, lagoons, and harbors. Notable features include San Diego Bay, Mission Bay Park, and Los Peñasquitos Lagoon. Notable features in surrounding cities that contribute to the visual character of the region include Batiquitos Lagoon, Agua Hedionda Lagoon, Buena Vista Lagoon, San Elijo Lagoon, and Oceanside Harbor. Coastal parks, including Border Field State Park, the Tijuana estuary, Silver Strand State Beach, and Torrey Pines State Reserve and Beach; and prominent land and water features, such as Cabrillo National Monument on Point Loma, Sunset Cliffs, La Jolla Cove, Mount Soledad, and the offshore Coronado Islands, are also visual resources along the coast.

Within the foothills, the prominent visual resources include rivers, lakes, open bodies of water, and parks such as the Otay River, Sweetwater River, San Diego River, Upper and Lower Otay Lakes, Sweetwater Reservoir, Lake Hodges, San Vicente Reservoir, Mission Trails Regional Park, Santee Lakes Regional Park, Tecolote Canyon, Los Peñasquitos Canyon Preserve, Old Town State Historic Park, and Presidio Park.

Public vantage points by community planning area are included in **Table 3.B-1** and generally relate to areas that face the Pacific Ocean, or other bodies of water, views overlooking canyons and open space, and views of the downtown skyline. Such views are further protected by Proposition D, which was passed in 1972 and limits the building height in areas generally west of I-5 to a maximum of 30 feet. Scenic views in the City are gradually being improved through the City's Utilities Undergrounding Program, which began in 1970 and has relocated 30-35 miles of overhead utility lines underground each year with the goal of relocating all lines within the next 50 years.

City of San Diego

The City of San Diego is separated into unique communities and neighborhoods that are physically defined by the canyons and foothills that create natural barriers that form separate, smaller mesas. The sloping topography of the City of San Diego is shown in **Figure 3.B-1**. While development has occurred in Mission Valley and portions of other drainages, efforts to provide open space and reduce land use intensity in the San Dieguito River Valley, Los Peñasquitos Canyon, San Clemente Canyon, and the Otay River Valley allows the City of San Diego an opportunity to retain and/or develop unique communities with distinct physical separation.

The urbanization of San Diego began around 1869 when Alonzo Horton moved the center of commerce and government from Old Town (Old San Diego) to New Town (Downtown). Development spread from Downtown based on a variety of factors, including the availability of potable water and transportation corridors. Factors such as views and access to public facilities affected land values, which in turn affected the character of neighborhoods that developed. Neighborhoods were developed around small parcels, incrementally and over a long period of time, so that many neighborhoods have a distinctive character defined by their buildings, colors, materials, and landscaping.

The City provides citywide urban design recommendations, in the Urban Design Element of the City's General Plan (2008), to maintain the character of the built environment. Some of the more recognizable architectural styles in the City are Spanish Colonial, Pre-Railroad New England, National Vernacular, Victorian Italianate, Stick, Queen Anne, Colonial Revival, Neoclassical, Shingle, Folk Victorian, Mission, Craftsman, Monterey Revival, Italian Renaissance, Spanish Eclectic, Egyptian Revival, Tudor Revival, Modernistic, International, Modern, and Contemporary. While historic development has traditionally occurred on vacant land, development is currently trending towards infill projects, including the redevelopment of a parcel or multiple parcels, as little vacant and developable land remains within the City.

These neighborhoods and communities are connected by the interstate and highway system, major arterial freeways, highways, surface streets, public transportation routes, bikeways and open space trails. Local connectivity is also provided by public transit, including buses and regional light rail, with interstate and international connectivity provided through trains, interstate freeways, and the federal ports of entry to the Republic of Mexico.

**TABLE 3.B-1
COMMUNITY PLAN IDENTIFIED VANTAGE POINTS**

Community	Identified Public Vantage Point	Description
Barrio Logan / Harbor 101	Harbor Drive Bridge over Switzer Creek	Views to the San Diego Bay
	Chollas Creek	Views to the San Diego Bay
	28th Street and Harbor Drive	Views toward I-5, SR-15 freeway interchanges (major sculptural feature)
	Logan Avenue	Centre City skyline and major industrial waterfront features
	National Avenue	Centre City skyline and major industrial waterfront features
	Northern portion of community	Centre City skyline and major industrial waterfront features
Black Mountain Ranch	Northern portion of community	Views overlooking the canyon and open space
Carmel Mountain Ranch	I-15	Views into the southern portion of the community
	Communitywide	Views facing outside the community from open space areas in the south central portion of the community
Carmel Valley	Views not in current community plan	
Clairemont Mesa	Designated open spaces west of Clairemont Drive	Views facing west to Mission Bay and Pacific Ocean
	Communitywide	Many neighborhoods along the mesa overlook Mission Bay and the Pacific Ocean to the west, Fortuna Mountain and Cowles Mountain to the east and the open space canyon system
College Area	Views not in current community plan	
Del Mar Mesa	Views not in current community plan	
Elliott	Views not in current community plan	
Fairbanks Ranch Country Club	Views not in current community plan	
Golden Hill	Citywide	Structures should be designed to protect views of Golden Hill's natural scenic amenities, especially San Diego Bay, the Coronado Bay Bridge, Balboa Park, Switzer Canyon and the 32nd Street and 34th Street canyons
Greater North Park	Views not in current community plan	
Kearny Mesa	I-805, SR-52 & I-15	Create attractive views toward the community
La Jolla	Torrey Pines City Park	Viewshed overlooking coast
	La Jolla Farms Road	Scenic Overlook and Intermittent or Partial Vista looking west towards the coast
	Scripps Natural Reserve	Viewshed overlooking coast
	Bluff - top easement at La Jolla Shores Lane	View Cone overlooking coast
	Ellentown Road	Scenic Overlook looking west towards the coast
	La Jolla Shores Drive from Torrey Pines Road	Intermittent or Partial Vista looking west towards the coast
	La Jolla Shores Drive looking south from the vicinity of Scripps Institute of Oceanography	Viewshed overlooking coast, Scenic Overlook, Intermittent or Partial Vista, and a road from which coastal body of water can be seen
	Allen Field	Viewshed looking west towards the coast
	Bordeaux Avenue (western half)	Scenic Overlook looking west towards the coast
	El Paseo Grande (after it turns east)	View corridor and a road from which coastal body of water can be seen.
	Camino del Oro (after it turns east)	Road from which coastal body of water can be seen
	Whale Watch Way	Intermittent or Partial Vista looking west towards the coast

TABLE 3.B-1 (Continued)
COMMUNITY PLAN IDENTIFIED VANTAGE POINTS

Community	Identified Public Vantage Point	Description
La Jolla (cont.)	Cliffridge Park	Viewshed looking west towards the coast
	Kellogg Park	Viewshed overlooking coast and beach
	Calle Frescota	View corridor looking west towards the coast
	Prestwick Drive	Intermittent or Partial Vista looking west towards the coast
	Vallecitos	View corridor looking west towards the coast
	Avenida de la Playa	View corridor looking west towards the coast
	Calle del Cielo	Views looking west towards coast
	Pottery Canyon Park	Scenic Overlook looking west towards the coast
	Costabelle Drive	Scenic Overlook looking west towards the coast
	Spindrift Drive (south of the Marine Room Restaurant)	Viewshed looking west towards coast
	Charlotte Park (at the foot of Charlotte Street)	View Cone and View Corridor overlooking coast
	Coast Boulevard, Children's Pool, Shell Beach, Ellen B. Scripps Park and La Jolla Cove	Viewshed along coast looking north, east and west
	Prospect Street and Cave Street	View Cone and View Corridor overlooking coast
	Coast Walk	View Cone overlooking coast
	Park Row (north end)	View Corridor looking north towards the coast
	Torrey Pines Road	Road from which coastal body of water can be seen looking north towards the coast
	Public open space on Torrey Pines Road between St. Louis Terrace and Calle de la Plata	Intermittent or Partial Vista looking north towards the coast
	Azure Coast Drive	Views looking west towards coast
	Hidden Valley Road	Intermittent or Partial Vista looking west towards the coast
	Ardath Road	Road from which coastal body of water can be seen looking west towards
	Girard Avenue	the coast
	Jenner Street	Scenic Overlook northwest towards the coast
	View corridor easement through 7963 Prospect Place to ocean	View Corridor looking northwest towards the coast
	Easement across from John Coal Book Store from Prospect Street and Recreation Center	Scenic Overlook west towards the coast
	Hillside Drive (portions)	Scenic Overlook west towards the coast
	Caminito Avola/Via Avola	Scenic Overlook west towards the coast
	Via Siena at Hillside Drive	View Cone looking north, east and west towards the coast
	Rue Denise	View Cone looking north, east and west towards the coast
	La Jolla Scenic Drive South (portions)	Scenic Overlook northwest towards the coast
	Mt. Soledad (north of Ardath Rd)	Scenic Overlook northwest towards the coast
	Rue Adriane	View Cone looking east towards canyons
	Rue Michael	Scenic Overlook towards the coast
	Senn Way	Scenic Overlook towards the coast
	Rue de Roark	Scenic Overlook towards the coast
	Coast Boulevard Park and South Coast Boulevard	Scenic Overlook towards the coast
	View corridor at southwest side of Scripps Hotel site, from Prospect Street	Viewshed south and west along the coast

TABLE 3.B-1 (Continued)
COMMUNITY PLAN IDENTIFIED VANTAGE POINTS

Community	Identified Public Vantage Point	Description
La Jolla (cont.)	La Jolla Community Center Park, Cuvier Street	View corridor west towards the coast
	From top of Cuvier Street at Prospect	View Cone looking west towards the coast
	Via Capri (portions)	View corridor northwest towards the coast
	Mount Soledad	Viewshed panoramic views north, south, west, and east
	Country Club Drive	Scenic Overlook towards the coast
	Marine Street (Jones Beach)	View corridor west towards the coast
	Sea Lane	View corridor west towards the coast
	Belvedere Street	View corridor west towards the coast
	West Muirlands Drive	Scenic Overlook towards the coast
	Neptune Place and La Jolla Strand Park	Road from which coastal body of water can be seen looking west towards the coast
	Westbourne Street	View corridor west towards the coast
	Nautilus Street	View corridor west towards the coast and road from which coastal body of water can be seen looking west towards the coast
	Muirlands Drive between Nautilus and La Jolla Mesa Drive	Intermittent or Partial Vista looking west towards the coast
	Soledad Mountain Rd	Intermittent or Partial Vista looking south towards downtown and the coast
	Windandsea Park	View Cone looking west along the coast
	El Camino del Teatro	Scenic Overlook towards the coast
	Portions of La Jolla Scenic Drive South	Road from which coastal body of water can be seen looking south and west towards the coast
	Bonair Street	View corridor west towards the coast
	Plaza del Norte and Playa del Sur	Intermittent or Partial Vista west along the coast
	Gravilla Street	View corridor west towards the coast
	Kolmar Street	View corridor west towards the coast
	Rosemont Street	View corridor west towards the coast
	Palomar Street	View corridor west towards the coast
	Fay Avenue	Bike Path Views of open space, canyons
	Inspiration Drive	Scenic Overlook towards the coast
	Hermosa Terrace Park	Viewshed south and west along the coast
	Newkirk Drive	Scenic Overlook towards the coast
	Rodeo Drive	Scenic Overlook towards the coast
	Via Espana	Scenic Overlook towards the coast
	Camino de la Costa (includes Cortez Place, Costa Place)	Viewshed south and west along the coast
	Desert View Drive	Intermittent or Partial Vista towards the coast
	La Jolla Rancho Road	Scenic Overlook towards the coast
	Ravenswood Road	Intermittent or Partial Vista towards the coast
	La Jolla Hermosa Park	Viewshed north and west along the coast
	La Jolla Mesa Drive (from Cottontail Lane to Skylark Street)	Road from which coastal body of water can be seen looking south and west towards the coast
	Moss Lane, off Dolphin Place	View Cone at the coast
	Bird Rock Avenue	View corridor west towards the coast
	Dolphin Place	Intermittent or Partial Vista towards the coast
	Coral Lane	View corridor west towards the coast
	Chelsea Place	Intermittent or Partial Vista towards the coast
	Forward Street	Viewshed looking south towards the coast

TABLE 3.B-1 (Continued)
COMMUNITY PLAN IDENTIFIED VANTAGE POINTS

Community	Identified Public Vantage Point	Description
La Jolla (cont.)	Midway Street	Viewshed looking south towards the coast
	Colima Street (end of road closest to the ocean)	Scenic Overlook towards the coast
	Calumet Park	Viewshed south and west along the coast
	San Colla Street	Scenic Overlook towards the coast
	Ricardo Place	Scenic Overlook towards the coast
	Bandera Street	View corridor west towards the coast
	Sea Ridge Drive	Intermittent or Partial Vista towards the coast
	Linda Way	View corridor south towards the coast
	Tourmaline Surfing Park	View corridor and view cone west towards the coast
	La Canada Canyon	Viewshed west towards the coast
	Princess Street	View Cone north overlooking the coast
Linda Vista	Tecolote Canyon	Protect public views from the canyon
Mid-City	Communitywide	Framed views of existing aesthetic resources such as parks and community landmarks
	Communitywide	Panoramic views of the bay, open spaces, and mountains from street rights-of-way and other public areas
Midway/Pacific Highway Corridor	Pacific Highway between Sassafra Street and Laurel Street	Preserve scenic vistas to the bay and other coastal areas and utilize building design along view corridors to enhance views to the waterfront from public rights-of-way
Mira Mesa	Los Penasquitos Canyon Preserve	Provide view of canyon with scenic overlooks
Miramar Ranch North	Miramar Lake	Views from and of these areas across the lake
	Western escarpment of community	Maintain views to the ocean while providing a high quality visual experience to onlookers from the mesas below to the west
Mission Beach	Views not in current community plan	
Mission Valley	Communitywide	Views should be provided from public streets into the river corridor
	Communitywide	Aerial views from the hillsides into the river area from public areas such as
Navajo	Views not in current community plan	
Old Town	Views not in current community plan	
Otay Mesa	Communitywide	Preserve privacy and views
Otay Mesa - Nestor	Palm Avenue Transit Center/Park-and-Ride	Provide a viewpoint overlooking the valley, north of the trolley station parking lot. Provide physical access, via a stairway, into the valley
	Midway Baptist Church	Encourage the Church to provide a public viewpoint overlooking the valley
	Palm Avenue	This site is the only area between I-5 and I-805 that provides direct views into the valley from Palm Avenue. Preserve visual access and provide a public viewpoint from Palm Avenue. Provide public trail and vehicular access along the existing unimproved road alignment from Palm Avenue into the valley.
	Montgomery High School	Provide pedestrian access through the school campus to the sites north of the ball fields and stadium. Improve this area of natural bluffs overlooking the valley as a passive recreation and viewing area

TABLE 3.B-1 (Continued)
COMMUNITY PLAN IDENTIFIED VANTAGE POINTS

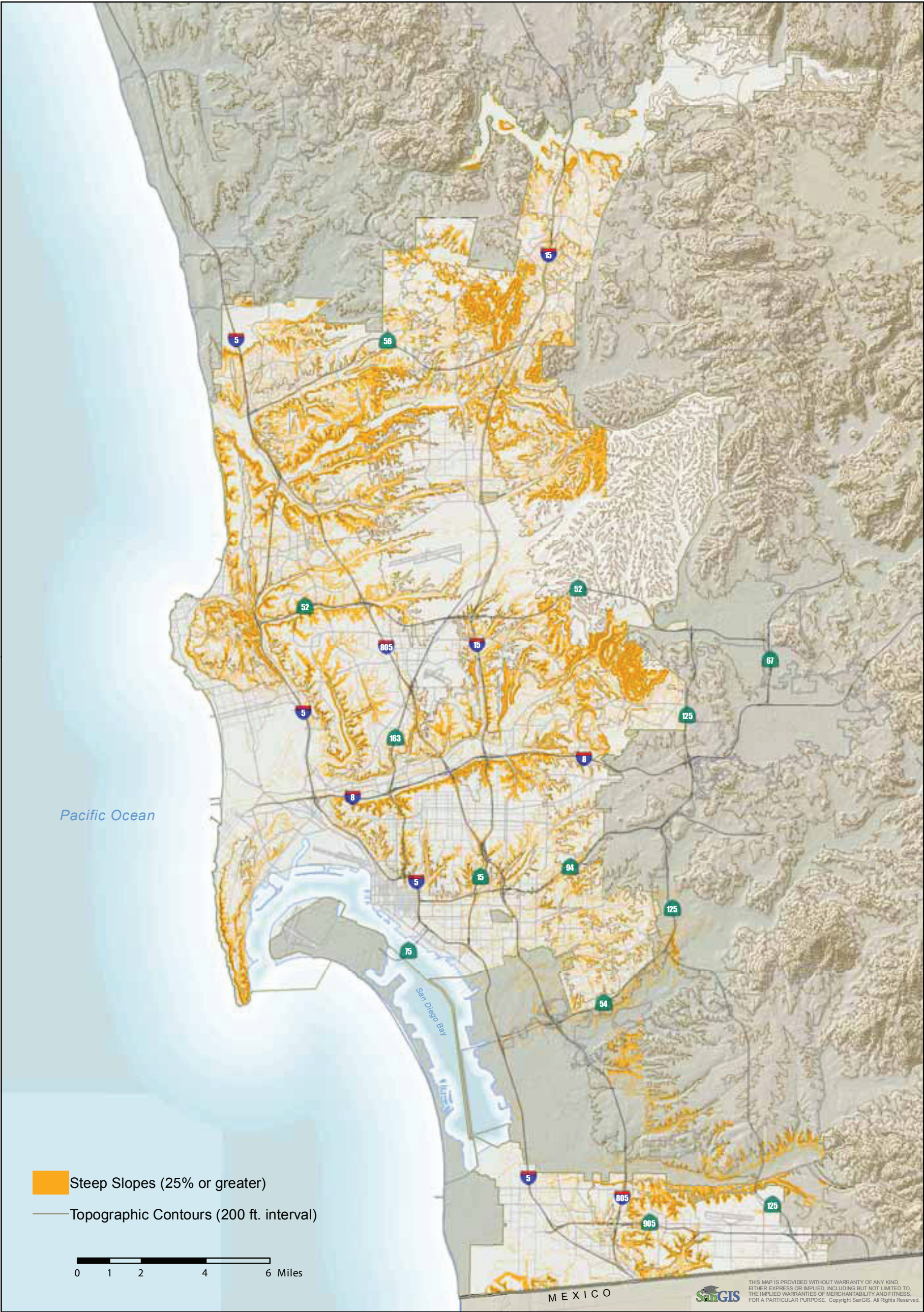
Community	Identified Public Vantage Point	Description
Otay Mesa – Nestor (cont.)	Cochran Avenue	This site is proposed as a mini park. Provide a public viewpoint overlooking the valley, including landscaping and seating. Design of this area should prevent vehicular access north of Lindberg Street, and should discourage and prevent trash dumping over the cliff
	Finney Elementary School	Provide pedestrian access through the school campus to the north of the ball field and playground. Improve this area of natural bluffs overlooking the valley and finger canyons as a passive viewing area
	Murrieta Circle	An existing utility easement road provides access from Murrieta Circle down to the valley. Work with SDG&E to provide public access to this trailhead and viewpoint overlooking the valley.
	Servando Avenue	Provide viewpoints along the alignments of Valentino Street and Bluehaven Court by clearing non-sensitive vegetation along the south side of this street, adjacent to the Tijuana River Valley. The viewpoints will provide aesthetic enjoyment for local residents and assist the U.S. Border Patrol in their operations
Pacific Beach	Loring Street	View corridor facing west toward the ocean
	Law Street	View corridor facing west toward the ocean
	Chalcedony Street	View corridor facing west toward the ocean
	Missouri Street	View corridor facing west toward the ocean
	Diamond Street	View corridor facing west toward the ocean
	Emerald Street	View corridor facing west toward the ocean
	Felspar Street	View corridor facing west toward the ocean
	Mission Boulevard	Intermittent public view of the ocean
	Bayard Street (south)	Intermittent public view of the ocean
	Pacific Beach Drive	Intermittent public view of the ocean
	Lamont Street	View facing south to Mission Bay
	Grand Avenue (west and central portion community)	Intermittent public view of the ocean and bay
	I-5 (southern portion of the community)	View facing south to Mission Bay
Pacific Highlands Ranch	Riviera to Crown Point Drive	Views of the bay
	Gonzales Canyon and east-west urban amenity	Open space overlook
	Near elementary school/park overlooking	Overlooking McGonigle Canyon
	McGonigle Canyon	
	South terminus of eastern neighborhood parkway	Open space overlook
Peninsula	Community-wide	Utilize public view opportunities on the edge of the MHPA
	Catalina Boulevard (southern portion)	Coastal vistas facing east and west
	Shelter Island Drive	Bay and downtown view facing north, west and south
	Rosecrans Street	Facing southeast
	Talbot Street	Facing east toward the San Diego Bay
	Canon Street	Facing southeast toward the San Diego Bay
	Garrison Street	Facing southeast toward the San Diego Bay
	Chatsworth Boulevard	Facing northeast

TABLE 3.B-1 (Continued)
COMMUNITY PLAN IDENTIFIED VANTAGE POINTS

Community	Identified Public Vantage Point	Description
Peninsula (cont.)	West Point Loma Boulevard	Facing south/southeast
	Famosa Boulevard	Facing south
	Santa Barbara Street	Facing northwest toward the coast
	Point Loma Avenue	Facing northwest toward the coast
	Sunset Cliffs Boulevard	Coastal vistas facing west
	Sunset Cliffs Shoreline Park	Unobstructed ocean view
	Former NTC site	Southeastern view corridors from Womble Street to Sims Rd
Rancho Bernardo	Views not in current community plan	
Rancho Penasquitos	Communitywide	Public access to canyon rims and views should be provided at suitable locations in the form of paths, scenic overlooks and streets
	Communitywide	Encourage retention of wildlife habitat value in connected open space systems by providing visual access where possible by overlooks
Sabre Springs	Four viewpoints and passive areas along Chicarita Creek and Penasquitos Creek	
San Pasqual Valley	Views not in current community plan	
San Ysidro	Views not in current community plan	
Scripps Miramar Ranch	Miramar Reservoir	Public viewpoints overlooking the reservoir
	Pomerado Road	Overlooking Carroll Canyon
	SDG&E Easement (Area "E")	View toward open space
Serra Mesa	Views not in current community plan	
Skyline - Paradise Hills	Communitywide	Views of undeveloped hillsides, canyons, and mountains toward the east, should be protected
Sorrento Hills	Views not in current community plan	
Southeast	Communitywide	Care should be taken to maintain and enhance views to designated open space areas from public rights-of-way. These views should be considered in the review of discretionary permits
Tierrasanta	Communitywide	Public views toward open space including Mission Trails Regional Park and Admiral Baker Field
Tijuana River Valley	Views not in current community plan	
Torrey Highlands	Views not in current community plan	
Torrey Pines	Views not in current community plan	
University	Communitywide	Visual access to open space areas from public roadways
Uptown	Adams Avenue at Campus Avenue	Viewshed facing northwest
	10th Avenue and Johnson Avenue	Viewshed facing north/northeast
	Northern edge of 3rd Avenue	Viewshed overlooking Mission Valley
	Northern edge of Stephens Street at West Arbor Drive	Viewshed facing north toward Mission Valley
	Pringle Street at Neale Street	Viewshed facing southwest
	Laurel Street at 1Street	Viewshed facing west
Via de la Valle	San Andres Drive and Via Campestre	View facing north overlooking golf course
	West of San Andres Drive and East of Highland Drive	View facing southeast
	South of San Andres Drive and North of Via de la Valle	Views facing south

SOURCE: General Plan Final PEIR, 2007.

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SOURCE: City of San Diego Draft General Plan Final PEIR, September 2007

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B.3 Regulatory Setting

Federal

There are no federal regulations that pertain to visual resources.

State

California Scenic Highway Program

Many State highways are located in areas of outstanding natural beauty. California's Scenic Highway Program was created by the Legislature in 1963 to preserve and protect scenic highway corridors from change that would diminish the aesthetic value of lands adjacent to highways. The State laws governing the Scenic Highway Program are found in the Streets and Highways Code, (Section 260 et seq.) The State Scenic Highway System includes a list of highways that are either eligible for designation as scenic highways or are currently designated. These highways are identified in Section 263 of the Streets and Highways Code.

A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. When a city or county nominates an eligible scenic highway for official designation, it must identify and define the scenic corridor of the highway. Because a scenic corridor is the land generally adjacent to and visible from the highway, it is identified using a motorist's line of vision. A reasonable boundary is selected when the view extends to the distant horizon.

The corridor protection program does not preclude development, but seeks to encourage quality development that does not degrade the scenic value of the corridor. Jurisdictional boundaries of the nominating agency are also considered. The agency must also adopt ordinances to preserve the scenic quality of the corridor or document such regulations that already exist in various portions of local codes. These ordinances make up the scenic corridor protection program.

Senate Bill 226

The passage of SB 226 added section 21080.35 to the Public Resources Code, and created a new exemption under CEQA for the installation of solar energy systems, including associated equipment, on the roof of an existing building or at an existing parking lot. The SB 226 exemption applies to those systems that occupy less than 500 square feet of ground space, and includes all associated equipment that enable the generation and use of solar electricity or solar-heated water, except for substations.

Local

The General Plan provides policies which help reduce the potential for impacts to public views. The General Plan addresses the natural environment, preserving open space systems and targeting new growth into compact villages through urban form and design policies. More specifically, the Urban Design and Conservation Elements contain policies which address development adjacent

to natural features and reduce visual impacts to scenic areas or viewsheds. Relevant policies from the General Plan are listed below.

General Urban Design

UD-A.1 Preserve and protect natural landforms and features.

- a. Protect the integrity of community plan designated open spaces (see also Conservation Element, Policy CE-B.1).
- b. Continue to implement the Multiple Species Conservation Program (MSCP) to conserve San Diego's natural environment and create a linked open space system. Preserve and enhance remaining naturally occurring features such as wetlands, riparian zones, canyons, and ridge lines.

UD-A.2 Use open space and landscape to define and link communities.

- a. Link villages, public attractions, canyons, open space and other destinations together by connecting them with trail systems, bikeways, landscaped boulevards, formalized parks, and/or natural open space, as appropriate.
- b. Preserve and encourage preservation of physical connectivity and access to open space.
- c. Recognize that sometimes open spaces prevent the continuation of transportation corridors and inhibit mobility between communities. Where conflicts exist between mobility and open space goals, site-specific solutions may be addressed in community plans.

UD-A.3 Design development adjacent to natural features in a sensitive manner to highlight and complement the natural environment in areas designated for development.

- a. Integrate development on hillside parcels with the natural environment to preserve and enhance views, and protect areas of unique topography.
- b. Minimize grading to maintain the natural topography, while contouring any landform alterations to blend into the natural terrain.
- c. Utilize variable lot sizes, clustered housing, stepped-back facades, split-level units or other alternatives to slab foundations to minimize the amount of grading.
- d. Consider terraced homes, stepped down with the slope for better integration with the topography to minimize grading in sensitive slope areas.
- e. Utilize a clustered development pattern, single-story structures or single-story roof elements, or roofs sloped toward the open space system or natural features, to ensure that the visibility of new developments from natural features and open space areas are minimized.
- f. Provide increased setbacks from canyon rims or open space areas to ensure that the visibility of new development is minimized.

- g. Screen development adjacent to natural features as appropriate so that development does not appear visually intrusive, or interfere with the experience within the open space system. The provision of enhanced landscaping adjacent to natural features could be used to soften the appearance of or buffer development from the natural features.
- h. Use building and landscape materials that blend with and do not create visual or other conflicts with the natural environment in instances where new buildings abut natural areas. This guideline must be balanced with a need to clear natural vegetation for fire protection to ensure public safety in some areas.
- i. Ensure that the visibility of new development from natural features and open space areas is minimized to preserve the landforms and ridgelines that provide a natural backdrop to the open space systems. For example, development should not be visible from canyon trails at the point the trail is located nearest to proposed development. Lines-of-sight from trails or the open space system could be used to determine compliance with this policy.
- j. Design and site buildings to permit visual and physical access to the natural features from the public right-of-way.
- k. Encourage location of entrances and windows in development adjacent to open space to overlook the natural features.
- l. Protect views from public roadways and parklands to natural canyons, resource areas, and scenic vistas.
- m. Preserve views and view corridors along and/or into waterfront areas from the public right-of-way by decreasing the heights of buildings as they approach the shoreline, where possible.
- n. Provide public pedestrian, bicycle, and equestrian access paths to scenic viewpoints, parklands, and where consistent with resource protection, in natural resource open space areas.
- o. Provide special consideration to the sensitive environmental design of roadways that traverse natural open space systems to ensure an integrated aesthetic design that respects open space resources. This could include the use of alternative materials such as “quiet pavement” in noise sensitive locations, and bridge or roadway designs that respect the natural environment.
- p. Design structures to be ignition and fire-resistant in fire prone areas or at-risk areas as appropriate. Incorporate fire-resistant exterior building materials and architectural design features to minimize the risk of structure damage or loss due to wildfires.

UD-A.4 Use sustainable building methods in accordance with the sustainable development policies in the Conservation Element.

UD-A.5i Maximize natural ventilation, sunlight, and views.

UD-A.8e Landscape materials and design should complement and build upon the existing character of the neighborhood.

- UD-A.9 Incorporate existing and proposed transit stops or stations into project design (see also Mobility Element, Policies ME-B.3 and ME-B.9).
- a. Provide attractively designed transit stops and stations that are adjacent to active uses, recognizable by the public, and reflect desired neighborhood character (see also Land Use Element, Policy LU-I.11).
 - b. Design safe, attractive, accessible, lighted, and convenient pedestrian connections from transit stops and stations to building entrances and street network (see also Land Use Element, Policy LU-I.10).
 - c. Provide generous rights-of-way for transit, transit stops or stations.
 - d. Locate buildings along transit corridors to allow convenient and direct access to transit stops/stations.
- UD-A.10 Design or retrofit streets to improve walkability, bicycling, and transit integration; to strengthen connectivity; and to enhance community identity. Streets are an important aspect of Urban Design as referenced in the Mobility Element (see also Mobility Element, Sections A, B, C, and F).
- UD-A.12 Reduce the amount and visual impact of surface parking lots (see also Mobility Element, Section G).
- a. Encourage placement of parking along the rear and sides of street-oriented buildings.
 - b. Avoid blank walls facing onto parking lots by promoting treatments that use colors, materials, landscape, selective openings or other means of creating interest. For example, the building should protrude, recess, or change in color, height or texture to reduce blank facades.
 - c. Design clear and attractive pedestrian paseos/pathways and signs that link parking and destinations.
 - d. Locate pedestrian pathways in areas where vehicular access is limited.
 - e. Avoid large areas of uninterrupted parking especially adjacent to community public view sheds.
 - f. Build multiple small parking lots in lieu of one large lot.
 - g. Retrofit existing expansive parking lots with street trees, landscape, pedestrian paths, and new building placement.
 - h. Promote the use of pervious surface materials to reduce runoff and infiltrate storm water.
 - i. Use trees and other landscape to provide shade, screening, and filtering of storm water runoff in parking lots (see also Conservation Element, Policy CE-A.12).
 - j. Design surface parking lots to allow for potential redevelopment to more intensive uses. For example, through redevelopment, well-placed parking lot

aisles could become internal project streets that provide access to future parking structures and mixed land uses.

UD-B.5d Emphasize the provision of high quality pedestrian and bikeway connections to transit stops/stations, village centers, and local schools.

UD-B.6 Utilize alleys to provide improved and alternative pedestrian access to sites. This would include consideration of a promenade or paseo design for alleys with enhanced landscaping, and residential units or uses that face the alleys to activate them as alternative pedestrian streets. This could provide an alternative function for alleys that is non-vehicular, but still provides linkages to other sites and uses and adds to a neighborhood's connectivity.

UD-C.1 "In villages and transit corridors identified in community plans, provide a mix of uses that create vibrant, active places in villages.

- a. Encourage both vertical (stacked) and horizontal (side-by-side) mixed-use development.
- b. Achieve a mix of housing types, by pursuing innovative designs to meet the needs of a broad range of households.
- c. Encourage placement of active uses, such as retailers, restaurants, cultural facilities and amenities, and other various services, on the ground floor of buildings in areas where the greatest levels of pedestrian activity are sought.
- d. Encourage the provision of approximately ten percent of a project's net site area as public space, with adjustments for smaller (less than ten acres) or constrained sites. Public space may be provided in the form of plazas, greens, gardens, pocket parks, amphitheaters, community meeting rooms, public facilities and services, and social services (see also UD-C.5 and UD-E.1).
 1. When public space is provided in the form of public parks in accordance with Recreation Element, Policy RE-A.9, and the public park space may be used to meet population-based park requirements.
 2. Where multiple property owners are involved in a village development, develop incentives or other mechanisms to help provide well-located public spaces.
- e. Utilize existing or create new Land Development Code zone packages or other regulations as needed for mixed-use development.
 1. Provide standards that address the particular design issues related to mixed-use projects, such as parking, noise attenuation and security measures, and minimize negative impacts on the community.
 2. Provide standards that address bulk, mass, articulation, height, and transition issues such as the interface with surrounding or adjacent development and uses, and minimize negative impacts on the community.
- f. Encourage location of mixed-use projects in transition areas and areas where small-scale commercial uses can fit into a residential neighborhood context."

- UD-C.4 Create pedestrian-friendly village centers (see also Mobility Element, Sections A and C)
- a. Respect pedestrian-orientation by creating entries directly to the street and active uses at street level.
 - b. Design or redesign buildings to include pedestrian-friendly entrances, outdoor dining areas, plazas, transparent windows, public art, and a variety of other elements to encourage pedestrian activity and interest at the ground floor level.
 - c. Orient buildings in village centers to commercial local streets, or to internal project drives that are designed to function like a public street, in order to create a pedestrian oriented shopping experience, including provision of on-street parking.
 - d. Provide pathways that offer direct connections from the street to building entrances.
 - e. Break up the exterior facades of large retail establishment structures into distinct building masses distinguished by offsetting planes, rooflines and overhangs or other means.
 - f. Where feasible, use small buildings in key locations to create a human scale environment in large retail centers. Incorporate separate individual main entrances directly leading to the outside from individual stores.
- UD-C.6 Design project circulation systems for walkability.
- a. Extend existing street grid patterns into development within existing fine-grained neighborhoods.
 - b. Design a grid or modified-grid internal project street system, with sidewalks and curbs, as the organizing framework for development in village centers.
 - c. Diagonal or “on-street” parallel parking may be appropriate along driveways in order to contribute to a “main street” appearance.
 - d. Provide pedestrian shortcuts through the developments to connect destinations where the existing street system has long blocks or circuitous street patterns.
 - e. Use pedestrian amenities, such as curb extensions and textured paving, to delineate key pedestrian crossings.
 - f. Design new connections, and remove any barriers to pedestrian and bicycle circulation in order to enable people to walk or bike, rather than drive, to neighboring destinations (see also Mobility Element, Sections A and F).
 - g. Lay out streets to take advantage of and maximize vistas into public view sheds.
 - h. Share and manage commercial, residential, and public parking facilities where possible to manage parking for greater efficiency (see also Mobility Element, Section G).

- i. Incorporate design features that facilitate transit service along existing or proposed routes, such as bus pullout areas, covered transit stops, and multi-modal pathways through projects to transit stops.

UD-C.7 Enhance the public streetscape for greater walkability and neighborhood aesthetics (see also UD-A.10 and Section F.).

- a. Preserve and enhance existing main streets.
- b. Establish build-to lines, or maximum permitted setbacks on designated streets.
- c. Design or redesign buildings to include architecturally interesting elements, pedestrian friendly entrances, outdoor dining areas, transparent windows, or other means that emphasize human-scaled design features at the ground floor level.
- d. Implement pedestrian facilities and amenities in the public right-of-way including wider sidewalks, street trees, pedestrian-scaled lighting and signs, landscape, and street furniture.
- e. Relate the ground floor of buildings to the street in a manner that adds to the pedestrian experience while providing an appropriate level of privacy and security
- f. Design or redesign the primary entrances of buildings to open onto the public street.

Open Space and Landform Preservation

CE-B.1 Protect and conserve the landforms, canyon lands, and open spaces that: define the City's urban form; provide public views/vistas; serve as core biological areas and wildlife linkages; are wetlands habitats; provide buffers within and between communities; or provide outdoor recreational opportunities.

- a. Utilize Environmental Growth Funds and pursue additional funding for the acquisition and management of MHPA and other important community open space lands. Support the preservation of rural lands and open spaces throughout the region.
- c. Protect urban canyons and other important community open spaces including those that have been designated in community plans for the many benefits they offer locally, and regionally as part of a collective citywide open space system (see also Recreation Element, Sections C and F; Urban Design Element, Section A).
- d. Minimize or avoid impacts to canyons and other environmentally sensitive lands, by relocating sewer infrastructure out of these areas where possible, minimizing construction of new sewer access roads into these areas, and redirecting of sewage discharge away from canyons and other environmentally sensitive lands.
- e. Encourage the removal of invasive plant species and the planting of native plants near open space preserves.

- f. Pursue formal dedication of existing and future open space areas throughout the City, especially in core biological resource areas of the City's adopted MSCP Subarea Plan.
- g. Require sensitive design, construction, relocation, and maintenance of trails to optimize public access and resource conservation.

Environmentally Sensitive Lands (ESLs) Regulations

Aside from policies in the General Plan which address topography and sensitive development, the City relies on ESL regulations to identify environmental resources at a site specific level. The City's ESL regulations help protect, preserve, and restore lands containing steep hillsides, sensitive biological resources, coastal beaches, sensitive coastal bluffs, or Special Flood Hazard Areas. The ESL regulations provide supplemental development regulations to the underlying zone to assure that development occurs in a manner that protects the natural and topographical character of these areas. The ESL regulations address permit requirements for development that would affect wetlands and State- and federally-listed species habitat, buffer requirements for wetlands within and outside of the Coastal Overlay Zone, development in the Multi-Habitat Planning Area (MHPA) which delineates 52,727 acres of core biological resource areas, and corridors targeted for conservation.

Proposition D

In 1972, voters approved Proposition D, which restricts the building height in areas generally west of I-5 to 30 feet. Prior to the adoption of Proposition D, multiple dwelling unit developments in San Diego were built to accommodate a range of densities at varying heights. Since the adoption of Proposition D, the bulk and scale of buildings has become more uniform as property owners seek to maximize development potential within the 30-foot height limit.

B.4 Impacts and Mitigation Measures

Significance Criteria

According to the City of San Diego's CEQA Significance Determination Thresholds, a significant impact with regard to visual effects and neighborhood character could occur if implementation of the CAP results in the following:

- A substantial obstruction of any vista or scenic view from a public viewing area as identified in the community plan;
- The creation of a negative aesthetic site or project;
- Project bulk, scale, materials, or style would be incompatible with surrounding development;
- Substantial alteration to the existing or planned character of the area, such as could occur with the construction of a subdivision in a previously undeveloped area;

- The loss of any distinctive or landmark tree(s), or stand of mature trees as identified in the community plan;
- Substantial change in the existing landform; or
- Substantial light or glare which would adversely affect daytime or nighttime view in the area.

Impact Analysis

As indicated in Table 2-5 in Chapter 2, Project Description, the proposed CAP actions that could have an impact on visual resources and neighborhood character include the following:

- **Action 2.1 Community Choice Aggregation Program or Similar Program.** Supporting measures and steps that support implementation of this action could result in installation of small scale and large scale renewable energy generation, transmission, and storage systems. These could affect scenic views, result in new sources of light or glare, or could have bulk and scale that would alter or be incompatible with existing neighborhood character.
- **Action 3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas, and Action 3.6 Implement Transit-Oriented Development within Transit Priority Areas.** These actions would facilitate the implementation of the City of Villages strategy and the shift to greater emphasis on mass transit and other modes of transportation. These actions could therefore result in new construction and other physical changes that could alter or block scenic views, create new sources of light or glare, or result in changes to or incompatibilities with existing neighborhood character.
- **Action 3.2 Implement the City's Pedestrian Master Plan in Transit Priority Areas; Action 3.3 Implement the City's Bicycle Master Plan; and Action 3.5 Implement a Roundabouts Master Plan.** These actions would make generally minor changes to improve or add pedestrian and bicycle facilities, primarily in and around the TPAs, and would result in the installation of up to 24 roundabouts to facilitate traffic flow. These changes could alter or block scenic views and vistas, and could be incompatible with existing neighborhood character.
- **Action 5.1 Urban Tree Planting Program.** Street and landscaping trees have the potential to alter or block scenic views and vistas, and to alter neighborhood character.

These potential impacts are examined in detail below. The potential for proposed CAP actions to change the appearance of historical structures is considered in Section 3.E, Historical Resources.

Issue 1: Would implementation of the CAP affect the visual quality of the planning area, particularly with respect to views from public viewing areas, vistas, or open spaces?

Several of the CAP strategies include actions that when implemented will result in physical changes to the environment. Some of these changes may have the potential for adverse effects on the visual quality of the area in which they are situated, and in particular, may result in alteration or obstruction of scenic views from public viewing areas, vistas, or open spaces.

Action 2.1 would involve implementation of a community choice aggregation program or other renewable energy program that would likely result in installation of both small scale and large

scale renewable energy facilities. Small scale facilities, such as rooftop photovoltaic panels, generally do not involve construction that substantially changes roof lines or adds massive or tall new features that would have the potential to substantially alter or obstruct views. Therefore, visual impacts of small scale renewable energy systems, implemented as an indirect consequence of adoption of the CAP and implementation of Action 2.1, would not be expected to result in a significant impact to scenic views. Furthermore, pursuant to Senate Bill (SB) 226, CEQA now includes a statutory exemption (Section 21080.35) that exempts solar projects installed on the roof of an existing building or parking lot. Therefore, projects of this kind are not required to undergo CEQA review.

Large scale renewable energy projects, such as solar and wind farms, could involve new, large or extensive facilities that could alter or block public views, within and outside the City. This could occur if, for example, a wind farm introduced a new, incompatible visual element to a scenic view from a public view point, vista, or open space. Depending on the affected vista and the degree of change, this could cause a significant impact. For facilities located outside of the City, the jurisdiction with land use authority would likely be the lead agency for environmental review pursuant to CEQA.

Proposed CAP Action 3.2: Implement the City's Pedestrian Master Plan in Transit Priority Areas, Action 3.3 Implement the City's Bicycle Master Plan, and Action 3.5 Implement a Roundabouts Master Plan involve generally minor changes to existing streetscapes. In general these improvements are low-lying, and do not involve construction of massive or tall structures. While these improvements may alter the visual quality of a neighborhood, these alterations would not generally result in a degradation of visual quality. Neither would these improvements have the potential to block or alter scenic views. Implementation of proposed CAP Actions 3.2, 3.3, and 3.5 would therefore be less than significant.

Proposed CAP Action 3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas, and Action 3.6 Implement Transit-Oriented Development within Transit Priority Areas are intended to facilitate implementation of major changes to the urban landscape already planned for in the General Plan, Sustainable Communities Strategy, and other planning documents. These changes would result in the development of more dense, built-up, and transit and alternative transportation-oriented development, particularly within the TPAs. More detailed, neighborhood-specific planning is occurring through updating of the Community Plans and may involve changes to land use designation and zoning. These changes may allow taller or more massive buildings, reduced set-backs, and altered streetscapes, all of which could introduce new elements to the urban landscape that could alter or block existing scenic views from public viewpoints, vistas, and open space, or that could adversely affect existing visual resources.

The General Plan and community plans contain numerous policies intended to protect scenic views and visual resources, including identification of scenic vantage points. The General Plan also provides design objectives to minimize visual impacts and screen new development from open space areas.

The Final Program Environmental Impact Report for the City's 2008 General Plan update (General Plan PEIR) notes that, while the General Plan policies are designed to minimize impacts to public views, there is no guarantee that all future implementation actions and development projects will adequately implement General Plan policies. As a result, in areas where public views of scenic resources exist, direct impacts could occur. The General Plan PEIR further notes that any development that is incompatible in shape, form, or intensity such that public views are impacted, will be analyzed and addressed in project-specific environmental reviews pursuant to CEQA, and that identification of appropriate project-level mitigation measures would be determined at that time. The General Plan PEIR states that General Plan policies and future compliance with established development standards would serve to reduce impacts to a degree, but cannot guarantee that all future project level impacts will be avoided or mitigated to a level less than significant. However, because the degree of impact and applicability, feasibility, and success of these measures could not be accurately predicted for each specific future project, the program level impacts related to blocked public views were considered significant and unavoidable. The CAP would facilitate implementation of the City of Villages strategy, which could result in potentially significant impacts as set forth in the General Plan PEIR. Because the potential for such impacts has already been identified in the General Plan PEIR, these impacts are not considered a consequence of CAP adoption and implementation.

CAP Action 5.1 Urban Tree Planting Program is part of CAP Strategy 5: Climate Resiliency. This strategy has the goal of increasing urban tree canopy coverage, specifically to achieve 15 percent urban tree canopy coverage by 2020 and 35 percent by 2035. Implementation of this action would result in extensive planting of many trees throughout the City. While trees themselves add aesthetic value, and selection of appropriate species would not be expected to conflict with or detract from existing visual quality, trees may, as they grow, have the potential to block or alter scenic views. By adhering to policies contained in the General Plan, community plans, and Urban Forest Management Plan (currently in draft form), the City would ensure that implementation of Action 5.1 would not adversely affect public views. An example of a policy for the plans would be limiting or disallowing the planting of tall trees in the scenic corridors identified in Table 3.B-1. Furthermore, trees that grow to the point that they do obstruct scenic views can be pruned, topped, or removed, which would mitigate the impact. In sum, while there is some potential for CAP Action 5.1 to result in adverse impacts to scenic views, good management of the urban tree planting program, including selection of planting locations and species, and good tree care practices, would ensure that this impact would be less than significant.

Significance of Impact

As described above, most of the proposed CAP actions do not have the potential to alter or block scenic views. Impacts from implementation of the City of Villages strategy have already been analyzed in the General Plan EIR. However, the development of large-scale renewable energy facilities within the City limits, which may result from implementation of CAP Action 2.1 could result in a significant impact to visual resources.

Mitigation Framework

Implementation of Mitigation Measure LU-1 (see Section 3.A, Land Use) would ensure that large-scale renewable energy projects are compatible and not in conflict with existing land use and zoning designations, and that any such facilities would not result in conflicts with adjacent land uses.

Significance after Mitigation

With implementation of Mitigation Measure LU-1, most potentially significant impacts to scenic views and visual quality from siting of most large-scale renewable energy facilities would be avoided. However, because the degree of impact and applicability, feasibility, and success of Mitigation Measure LU-1 cannot be accurately predicted for visual quality and scenic views for each specific project at this time, the program-level impact to visual effects and neighborhood character is considered significant and unavoidable.

Issue 2: Would implementation of the CAP introduce incompatible uses with surrounding development in terms of bulk, scale, materials, or style that would result in adverse visual impacts?

Issue 2 examines the potential for CAP actions to result in changes to the physical environment that would be fundamentally incompatible with the character of the surrounding community. In particular, Issue 2 explores whether CAP actions would result in construction of new developments or facilities, or alterations to existing structures, that use materials, styles, or designs, or that involve massing or materials that would be visually incompatible with existing neighborhood character. Issue 1 already examined the potential for CAP actions to affect the visual quality of the area, with particular reference to the potential to block or alter scenic views.

Action 2.1 would involve implementation of a community choice aggregation program or other renewable energy program that would likely result in installation of both small scale and large scale renewable energy facilities. Small scale facilities may introduce a new visual element to a neighborhood, including solar roof panels, but solar panels are already becoming common, and do not represent a major alteration in building design or character. Therefore, these small-scale facilities would not be expected to be substantially incompatible with the existing character of the surrounding area.

Large scale renewable energy projects, such as solar and wind farms, could involve new, large or extensive facilities with distinct visual characteristics. These facilities have an essentially industrial visual quality. Wind farms, in particular, involve tall, moving structures that are visually prominent. If located in or adjacent to a residential or mixed use neighborhood, large scale facilities may appear incompatible with the surrounding urban environment. Depending on the affected vista and the degree of change, this could cause a significant impact.

Proposed CAP Action 3.2: Implement the City's Pedestrian Master Plan in Transit Priority Areas, Action 3.3 Implement the City's Bicycle Master Plan, and Action 3.5 Implement a Roundabouts Master Plan involve generally minor changes to existing streetscapes, such as changes in signage, street marking, addition of bicycle lanes and paths, and wider sidewalks. Roundabouts add a new

element to the streetscape, but they are not tall or massive, and can be designed and landscaped to create a compatible and pleasing visual element. In summary, while changes related to proposed CAP actions 3.2, 3.3, and 3.5 may introduce new or altered visual elements to an existing neighborhood, they are generally minor changes. If their design follows design guidelines contained in the General Plan and community plans, they would not be expected to result in a substantial incompatibility with surrounding areas, and their impact would therefore be less than significant.

Proposed CAP Action 3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas, and Action 3.6 Implement Transit-Oriented Development within Transit Priority Areas would result in the development of more dense, built-up, and transit and alternative transportation-oriented development, particularly within the TPAs. Since there is little remaining vacant land in the City available for development, implementation of the City of Villages strategy would largely occur through infill and redevelopment occurring in selected built areas. These developments have the potential to substantially alter the existing urban environment, and create a new, different urban landscape that may be out of keeping with the scale of the existing landscape, and their design may be different from the surrounding neighborhood.

The General Plan PEIR notes that, as changes occur in established neighborhoods, the applicable policies in the General Plan related to neighborhood character will provide design guidelines to improve the transition between new and old structures. In addition, the General Plan influences the implementation of community plans as it establishes goals and policies for the pattern and scale of development and the character of the built environment. Individual community plans are intended to provide additional recommendations for how new development will occur. It is intended that the urban design policies of the General Plan be further supplemented with site-specific community plan recommendations. As community plans are updated, community and neighborhood character will be addressed more specifically.

While the policies, guidelines, and community plan update process are designed to minimize future impacts to community character, implementation of the City of Villages strategy, as facilitated by CAP Actions 3.1 and 3.6, may result in significant impacts associated with substantially altering the existing character of the City's neighborhoods. The General Plan PEIR concludes that there is no guarantee that all future implementation actions and development projects will adequately implement General Plan policies. The CAP does not include measures that would mitigate the potential for impacts of this kind. Therefore, the program-level impact related to community character identified in the General Plan PEIR would remain significant. Since, however, the potential for such impacts has already been identified in the General Plan PEIR, these impacts are not considered a consequence of CAP adoption and implementation.

CAP Action 5.1 Urban Tree Planting would result in extensive planting of many trees throughout the City. Trees add aesthetic value to urban landscapes, and selection of appropriate species would not be expected to conflict with or detract from existing visual quality, or to introduce incompatible visual elements into existing landscapes, and this impact would be less than significant.

Significance of Impact

As described above, most of the proposed CAP actions do not have the potential to result in substantial visual incompatibilities with existing landscapes. Impacts from implementation of the City of Villages strategy have already been analyzed in the General Plan EIR. However, the development of large-scale renewable energy facilities within the City limits, which may result from implementation of CAP Action 2.1, could result in such incompatibilities. This could result in a significant impact to visual quality and neighborhood character.

Mitigation Framework

Implementation of Mitigation Measure LU-1 (see Section 3.A, Land Use) would ensure that large-scale renewable energy projects are compatible and not in conflict with existing land use and zoning designations, and that any such facilities would not result in conflicts with adjacent land uses.

Significance after Mitigation

With implementation of Mitigation Measure LU-1, most potentially significant visual quality and neighborhood character impacts from siting of most large-scale renewable energy facilities would be avoided. However, because the degree of impact and applicability, feasibility, and success of Mitigation Measure LU-1 cannot be accurately predicted for visual compatibility with existing neighborhoods for each specific project at this time, the program-level impact to visual effects and neighborhood character is considered significant and unavoidable.

Issue 3: Would implementation of the CAP create substantial light or glare which would adversely affect daytime or nighttime views in the area?

New or remodeled construction associated with implementation of several of the proposed CAP Actions would have the potential to create new sources of nighttime light or daytime glare. These include renewable energy facilities associated with Action 2.1 Community Choice Aggregation Program, and the actions intended to facilitate implementation of the City of Villages strategy, i.e., Action 3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas, and Action 3.6 Implement Transit-Oriented Development within Transit Priority Areas.

Other CAP Actions considered for visual and neighborhood character impacts, including Action 3.2: Implement the City's Pedestrian Master Plan in Transit Priority Areas, Action 3.3 Implement the City's Bicycle Master Plan, Action 3.5 Implement a Roundabouts Master Plan, and Action 5.1 Urban Tree Planting Program, would not create extensive new reflective surfaces or nighttime lighting, and would therefore not have an impact related to light or glare.

Action 2.1 would result in widespread installation of small scale, distributed energy generation facilities, such as rooftop solar. Solar panels are designed to absorb light, not reflect it, and therefore are not a source of glare. Rooftop solar installations are not lit, and so would not create a new source of nighttime artificial light. Larger renewable energy facilities may also be developed within the City with implementation of Action 2.1. Like small-scale rooftop systems, solar panels in large solar farms are not highly reflective. Other types of facilities, such as wind

farms, transmission facilities, and storage facilities, generally use materials and coatings that are not highly reflective. Therefore, these larger facilities would not be expected to create a substantial new source of glare. Large renewable energy facilities may be lit at night, primarily for security and safety reasons. Lighting is typically minimal. Adherence to City design standards, such as use of down-cast landscape lighting, would minimize the potential for substantial new sources of artificial nighttime lighting. Therefore, Action 2.1 is not expected to result in a significant impact related to light and glare.

Proposed CAP Action 3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas, and Action 3.6 Implement Transit-Oriented Development within Transit Priority Areas would facilitate extensive new in-fill development and redevelopment within the TPAs, as discussed in the General Plan EIR. Adherence to General Plan and community plan design standards is anticipated to minimize impacts related to glare from reflective surfaces and new sources of nighttime lighting. Environmental review of individual projects requiring discretionary approval would provide additional opportunity to identify and mitigate site-specific and development-specific impacts of this kind. Mitigation measures, such as lighting design and use of non-reflective materials and architectural coatings, are generally effective at reducing such impacts to less than significant. Therefore, there is little potential for CAP Actions 3.1 and 3.6 to result in a substantial new source of light or glare, and the impact is less than significant.

Significance of Impact

As discussed above, implementation of the CAP would not be expected to result in a significant new source of light or glare. The impact is therefore less than significant.

Mitigation Framework

No mitigation is required.

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C. Air Quality

C.1 Introduction

This section analyzes potential air quality impacts that could result from implementation of the City of San Diego (City) Climate Action Plan (CAP).

C.2 Environmental Setting

Physical Setting

The San Diego Air Basin (SDAB) lies in the southwest corner of California and comprises the entire San Diego region. However, population and emissions are concentrated mainly in the western portion of the county. The air basin covers 4,200 square miles, includes about eight percent of the state's population, and produces about five percent of the state's criteria pollutant emissions (CARB, 2013a). The City of San Diego covers approximately 330 square miles, or eight percent, of the SDAB.

Air quality in the SDAB is impacted not only by local emissions, but also by pollutants transported from other areas, in particular, ozone and ozone precursor emissions transported from the South Coast Air Basin and the Republic of Mexico. Although the impact of transport is particularly important on days with high ozone concentrations, transported pollutants and emissions cannot be blamed entirely for the ozone problem in the San Diego area. Studies show that emissions from the SDAB are sufficient, on their own, to cause ozone violations (SDAPCD, 2007).

Topography and Climate

The topography in the San Diego region varies greatly, from beaches on the west to mountains and desert on the east, defined by mesa tops intersected by canyon areas. The topography in the San Diego region, along with local meteorology, influences the dispersal and movement of pollutants in the basin. The mountains to the east prohibit dispersal of pollutants beyond them and help trap the pollutants in inversion layers.

The weather of the San Diego region is influenced by the Pacific Ocean and its semi-permanent high-pressure systems that result in dry, warm summers and mild, occasionally wet winters. The average temperature ranges from the mid-40s to the high 90s. Most of the county's precipitation falls from November to April, with infrequent (approximately ten percent) precipitation during the summer. The average seasonal precipitation along the coast is approximately ten inches; the amount increases with elevation as moist air is lifted over the mountains.

The interaction of ocean, land, and the Pacific High Pressure Zone maintains clear skies for much of the year and drives the prevailing winds. Local terrain is often the dominant factor inland, and winds in inland mountainous areas tend to blow through the valleys during the day and down the hills and valleys at night.

In conjunction with the two characteristic onshore/offshore wind patterns, there are two types of temperature inversions (reversals of the normal decrease of temperature with height) which occur within the region that affect atmospheric dispersive capability and that act to degrade local air quality. In the summer, an inversion at about 1,100 to 2,500 feet is formed over the entire coastal plain when the warm air mass over land is undercut by a shallow layer of cool marine air flowing offshore. The prevailing sunny days in this region further exacerbate the smog problem by inducing additional adverse photochemical reactions. During the winter, a nightly shallow inversion layer (usually at about 800 feet) forms between the cooled air at the ground and the warmer air above, which can trap vehicular pollutants. The days of highest CO concentrations occur during the winter months.

The predominant onshore/offshore wind pattern is sometimes interrupted by so-called Santa Ana conditions, when high pressure over the Nevada-Utah area overcomes the prevailing westerly winds, sending strong, steady, hot and dry winds from the east over the mountains and out to sea. Strong Santa Ana winds tend to blow pollutants out over the ocean, producing clear days. However, at the onset or breakdown of these conditions or if the Santa Ana is weak, prevailing northwesterly winds reassert themselves and send a cloud of contamination from the Los Angeles Basin ashore in the SDAB.

Existing Air Quality

Regional Air Quality

As in other parts of California, overall air quality in the SDAB has improved, despite high growth rates, in part due to the benefits of cleaner technologies. In 2002, motor vehicles and other mobile sources were determined to emit 76 percent of the harmful pollutants that degrade the air quality of the San Diego region, and industrial sources emitted 14 percent (SDAQMD, 2002). As of 2013 San Diego County's air quality is the best it has been since the mid 1950's when air pollutant measuring began. Even so, pollutants from mobile sources still make up approximately 75 percent of the total pollutant emissions within the region (SDAQMD, 2013a).

Significant progress has been realized in the region's air quality since the early 1970s when SANDAG and the San Diego Air Pollution Control District (SDAPCD) began working together to reduce regional emissions. SANDAG is responsible for developing a "Transportation Control Measures (TCM) Plan" to help achieve air quality objectives for the region, which is developed with input from the City of San Diego. The SDAPCD adopts the TCM Plan as part of the RAQS, which is updated on a triennial basis and outlines measures for achieving state and national air quality standards. The SDAPCD is also responsible for stationary source tactics to reduce air pollution resulting from industry.

Criteria Air Pollutants

The Federal Clean Air Act (CAA) requires the U.S. Environmental Protection Agency (U.S. EPA) to identify National Ambient Air Quality Standards (NAAQS), or (national standards) to protect public health and welfare. National standards have been established for ozone, carbon monoxide,

nitrogen dioxide, sulfur dioxide, respirable particulate matter (PM₁₀ and PM_{2.5})¹, and lead. These pollutants are called “criteria” air pollutants because standards have been established for each of them to meet specific public health and welfare criteria set forth in the CAA. California has adopted more stringent ambient air quality standards for the criteria air pollutants (referred to as State Ambient Air Quality Standards, or state standards) and has adopted air quality standards for some pollutants for which there is no corresponding national standard. The national and state standards for criteria pollutants are provided above in the Regulatory Setting section.

Emissions of NO_x and ROG in the SDAB have been following statewide trends for each pollutant since 2000. These trends are largely due to motor vehicle controls and reductions in evaporative emissions. Mobile sources (both on-road and other) are by far the largest contributors to NO_x, and ROG in the SDAB. The majority of the PM₁₀ emissions are from area-wide sources (CARB, 2013a).

CARB and the SDAPCD collect ambient air quality data locally through a network of air monitoring stations. These data are summarized annually and are published in CARB’s California Air Quality Data Summaries. Active monitoring stations in San Diego County are located at 11 stations, shown on **Figure 3.C-1**. Air quality monitoring data for the five stations within the City of San Diego is shown in **Table 3.C-1**, which identifies the most recent available data for federal and state ambient air quality standards for the relevant air pollutants, along with the ambient pollutant concentrations of the three air pollutants that were measured at these stations and for which the SDAB remains “nonattainment” - ozone, PM₁₀, and PM_{2.5}.

While the data gathered at these monitoring stations may not necessarily reflect the unique air quality environment of all areas of the city and county, nor the proximity of site-specific stationary and street sources, they do present the nearest available benchmark and provide the reader with a reference point as to the pollutants of greatest concern in the region and the degree to which the area is out of attainment with specific air quality standards. In summary, the SDAB is non-attainment for the ozone (state and federal), PM₁₀ (state), and PM_{2.5} (state and federal) standards.

Ozone

Short-term exposure to ozone can irritate the eyes and cause constriction of the airways. Besides causing shortness of breath, ozone can aggravate existing respiratory diseases such as asthma, bronchitis, and emphysema. Ozone, the main component of photochemical smog, is primarily a summer and fall pollution problem. Ozone is not emitted directly into the air but is formed through a complex series of chemical reactions involving other compounds that are directly emitted. These directly emitted pollutants (also known as ozone precursors) include ROG and NO_x. The time period required for ozone formation allows the reacting compounds to spread over a large area, producing a regional pollution problem. Ozone problems are the cumulative result of regional development patterns rather than the result of a few significant emission sources. Once

¹ PM₁₀ and PM_{2.5} consist of particulate matter that is ten microns or less in diameter and 2.5 microns or less in diameter, respectively (a micron is one-millionth of a meter).

formed, ozone remains in the atmosphere for one or two days. Ozone is then eliminated through a chemical reaction with plants (reacts with chemicals on the leaves of plants); rainout (attaches to water droplets as they fall to earth); and, washout (absorbed by water molecules in clouds and later falls to earth with rain).

On-road motor vehicle emissions account for approximately 45 percent of smog (ROG + NO_x) in the San Diego region as of 2010 (CARB, 2013a). The NO_x and ROG emissions have been decreasing overall since 2000, mostly due to decreased emissions from motor vehicles, brought about by stricter motor vehicle emission standards. Over the last 35 years, stationary and area-wide source emissions of ROG have remained mostly unchanged due to stricter standards offsetting emissions from industry and population growth (CARB, 2013a).

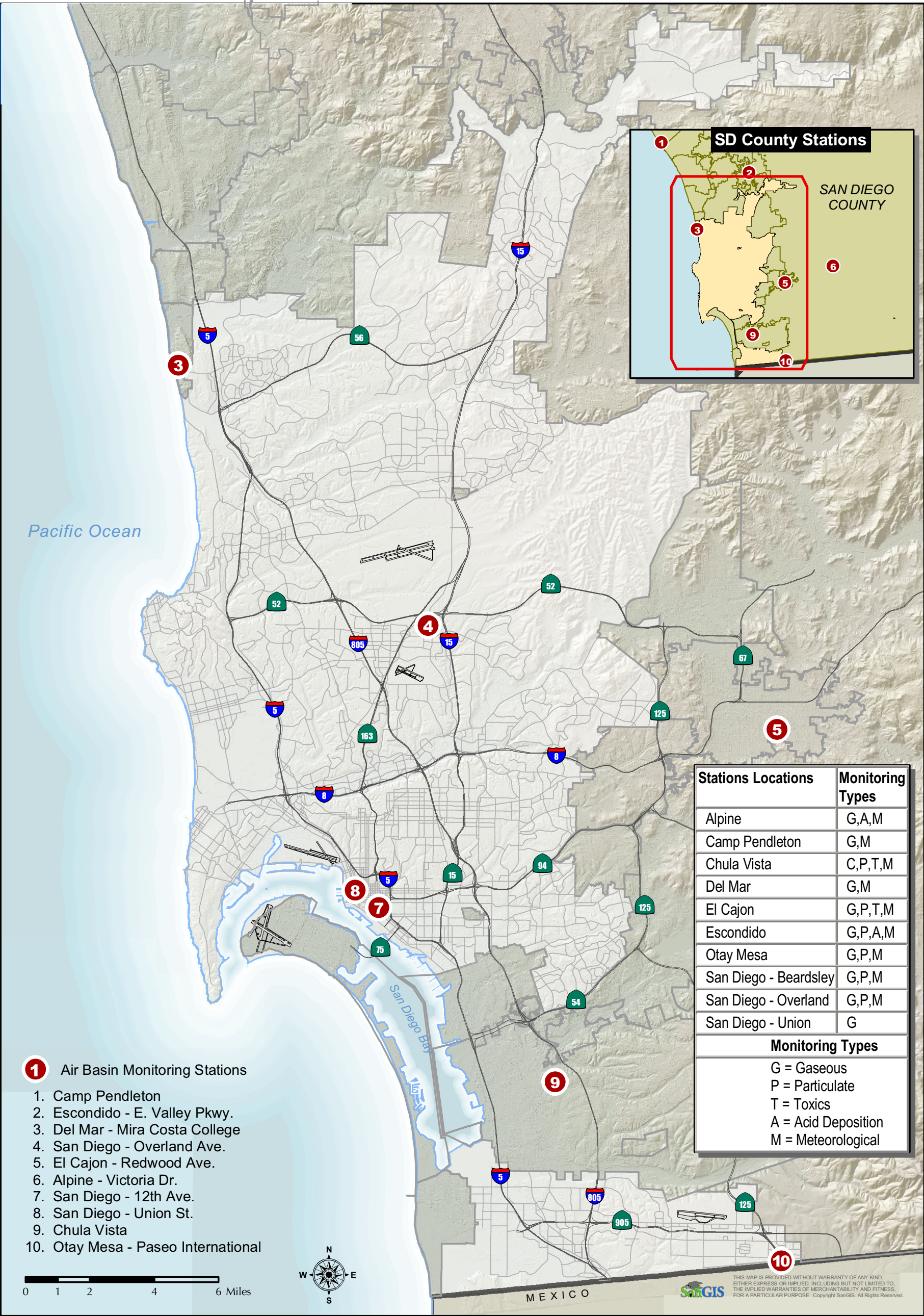
The federal one-hour ozone standard is attained when each monitoring site in the region has no more than three days in a three-year period within a maximum hourly average concentration exceeding the standard. The standard has now been attained and the SDAB has been redesignated as an attainment area by United States Environmental Protection Agency (U.S. EPA). San Diego still has not met the more restrictive state one-hour ozone standard, or the federal eight-hour ozone standard. In 2005, the U.S. EPA replaced the one-hour federal ozone standard with a more protective eight-hour standard to address the adverse health effects of prolonged exposure.

Table 3.C-1 shows SDAB exceedances for monitoring stations within the City of San Diego from 2009 to 2013. The Del Mar-Mira Costa College station recorded exceedances of the eight-hour state standard on three days in 2009 and at the San Diego-Overland Avenue station in 2009, 2010, and 2011. All other stations recorded exceedances of two times or less, with several years reporting no exceedance of either station or federal one or eight hour standards.

Carbon Monoxide

Ambient carbon monoxide concentrations normally are considered a local effect and typically correspond closely to the spatial and temporal distributions of vehicular traffic. Wind speed and atmospheric mixing also influence carbon monoxide concentrations. Under inversion conditions, carbon monoxide concentrations may be distributed more uniformly over an area that may extend some distance from vehicular sources. When inhaled at high concentrations, carbon monoxide combines with hemoglobin in the blood and reduces the oxygen-carrying capacity of the blood. This results in reduced oxygen reaching the brain, heart, and other body tissues. This condition is especially critical for people with cardiovascular diseases, chronic lung disease, or anemia, as well as for fetuses.

Improvements from the transportation sector, primarily resulting from advances in technology such as emissions control systems, have resulted in major reductions in CO emissions in the SDAB, following the statewide trend, of declining from 3,338 tons per day in 1975 to 953 tons per day in 2005 and an estimated 558 tons per day in 2020 (CARB, 2009a). The SDAB was reclassified as an attainment area for CO in 2004 and currently maintains its attainment status (SDAPCD, 2013a). The U.S. EPA approved the CO Maintenance Plan in 1998. As of 2011, the national CO standard had been attained statewide.



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**TABLE 3.C-1
SAN DIEGO AIR BASIN - SUMMARY OF AIR QUALITY MONITORING DATA (2009–2013)**

Station	Applicable Standard	Number of Days Standards Were Exceeded and Maximum Concentrations Measured ^a				
		2009	2010	2011	2012	2013
Del Mar-Mira Costa College						
Ozone						
- Days 1-hour State Std. Exceeded	>0.09 ppm ^b	1	0	0	0	0
- Max. 1-hour Conc. (ppm)		0.097	0.085	0.091	0.088	0.076
- Days 8-hour National Std. Exceeded	>0.075 ppm ^c	1	0	0	2	0
- Days 8-hour State Std. Exceeded	>0.07 ppm ^b	3	2	1	2	0
- Max. 8-hour Conc. (ppm)		0.084	0.072	0.075	0.079	0.070
Otay Mesa-Paseo International						
Ozone						
- Days 1-hour State Std. Exceeded	>0.09 ppm ^b	1	0	1	0	0
- Max. 1-hour Conc. (ppm)		0.098	0.076	0.095	0.081	0.073
- Days 8-hour National Std. Exceeded	>0.075 ppm ^c	0	0	1	0	0
- Days 8-hour State Std. Exceeded	>0.07 ppm ^b	0	0	1	0	0
- Max. 8-hour Conc. (ppm)		0.068	0.068	0.076	0.062	0.063
PM ₁₀						
- Estimated Days Over 24-hour National Std. ^d	>150 µg/m ³ ^c	0	0	0	-	-
- Estimated Days Over 24-hour State Std. ^d	>50 µg/m ³ ^b	146.4	136.0	138.5	-	-
- Max. 24-hour Conc. National/State (µg/m ³)		126.0/123.0	108.0/108.0	125.0/126.0	126.0/126.0	-
- State Annual Average (µg/m ³)	>20 µg/m ³ ^b	53.0	47.0	46.2	-	-
Carbon Monoxide						
- Max. 1-hour Conc. (ppm) National/State	>35 ppm/ >20 ppm	4.6	3.1	-	-	-
- Max. 8-hour Conc. (ppm) National and State	>9 ppm	3.1	2.2	-	-	-
Nitrogen Dioxide						
- Max. 1-hour Conc. (ppm) National/State	>10 ppm/ >0.18 ppm	0.091	0.091	0.10	0.077	0.091
- Annual Average (ppm) National/State	>0.053ppm/ >0.03ppm	0.020	0.020	0.020	0.020	0.019
Sulfur Dioxide						
- Max. 1-hour Conc. (ppm) National/State	>0.25 ppm/ >0.75 ppm	0.029	0.027	0.018	-	-
- Max. 24-hour Conc. (ppm) National/State	>0.14 ppm/ >0.04 ppm	0.008	0.007	0.006	-	-
- Annual Average (ppm)	>0.030 ppm	0.003	0.001	0.002	-	-
San Diego-1110 Beardsley Street						
Ozone						
- Days 1-hour State Std. Exceeded	>0.09 ppm ^b	0	0	0	0	0
- Max. 1-hour Conc. (ppm)		0.085	0.078	0.082	0.071	0.063
- Days 8-hour National Std. Exceeded	>0.075 ppm ^c	0	0	0	0	0
- Days 8-hour State Std. Exceeded	>0.07 ppm ^b	0	0	0	0	0
- Max. 8-hour Conc. (ppm)		0.063	0.066	0.061	0.065	0.061

TABLE 3.C-1 (Continued)
SAN DIEGO AIR BASIN - SUMMARY OF AIR QUALITY MONITORING DATA (2009–2013)

Station	Applicable Standard	Number of Days Standards Were Exceeded and Maximum Concentrations Measured ^a				
		2009	2010	2011	2012	2013
San Diego-1110 Beardsley Street (cont.)						
PM₁₀						
- Estimated Days Over 24-hour National Std. ^d	>150 µg/m ³ ^c	0	0	0	0	0
- Estimated Days Over 24-hour State Std. ^d	>50 µg/m ³ ^b	18.2	0	0	0	6
- Max. 24-hour Conc. National/State (µg/m ³)		59.0/ 60.0	40.0/40.0	48.0/49.0	45.0/47.0	90.0/ 92.0
- State Annual Average (µg/m ³)	>20 µg/m ³ ^b	29.4	23.4	24.0	22.2	25.4
PM_{2.5}						
- Estimated Days Over 24-hour National Std. ^d	>35 µg/m ³ ^c	3.4	0	0	1.0	1.1
- Max. 24-hour Conc. (µg/m ³)		52.1	29.7	34.7	39.8	37.4
- Annual Average (µg/m ³)	>12 µg/m ³ ^b	11.8	10.4	10.9	11.1	10.4
Carbon Monoxide						
- Max. 1-hour Conc. (ppm) National/State	>35 ppm/ >20 ppm	4.0	2.8	2.8	2.6	3.0
- Max. 8-hour Conc. (ppm) National and State	>9 ppm	2.8	2.2	2.4	1.9	2.1
Nitrogen Dioxide						
- Max. 1-hour Conc. (ppm) National/State	>10 ppm/ >0.18 ppm	0.078	0.077	0.067	0.065	0.072
- Annual Average (ppm) National/State	>0.053ppm/ >0.03ppm	0.017	0.014	0.014	0.013	0.014
Sulfur Dioxide						
- Max. 1-hour Conc. (ppm) National/State	>0.25 ppm/ >0.75 ppm	0.021	0.008	0.013	-	-
- Max. 24-hour Conc. (ppm) National/State	>0.14 ppm/ >0.04 ppm	0.005	0.002	0.002	-	-
- Annual Average (ppm)	>0.030 ppm	0.001	0.000	0.001		
San Diego-Kearny Villa Road						
Ozone						
- Days 1-hour State Std. Exceeded	>0.09 ppm ^b	-	0	0	1	0
- Max. 1-hour Conc. (ppm)		-	0.073	0.093	0.099	0.081
- Days 8-hour National Std. Exceeded	>0.075 ppm ^c	-	0	1	1	0
- Days 8-hour State Std. Exceeded	>0.07 ppm ^b	-	0	2	3	1
- Max. 8-hour Conc. (ppm)		-	0.061	0.084	0.077	0.071
PM₁₀						
- Estimated Days Over 24-hour National Std. ^d	>150 µg/m ³ ^c	-	-	-	-	0
- Estimated Days Over 24-hour State Std. ^d	>50 µg/m ³ ^b	-	-	-	-	0
- Max. 24-hour Conc. National/State (µg/m ³)		-	-	-	35.0/35.0	39.0/38.0
- State Annual Average (µg/m ³)	>20 µg/m ³ ^b	-	-	-	-	20.0
PM_{2.5}						
- Estimated Days Over 24-hour National Std. ^d	>35 µg/m ³ ^c	-	-	-	-	0
- Max. 24-hour Conc. (µg/m ³)		-	-	-	20.1	22.0
- Annual Average (µg/m ³)	>12 µg/m ³ ^b	-	-	-	22.0	22.0

TABLE 3.C-1 (Continued)
SAN DIEGO AIR BASIN - SUMMARY OF AIR QUALITY MONITORING DATA (2009–2013)

Station	Applicable Standard	Number of Days Standards Were Exceeded and Maximum Concentrations Measured ^a				
		2009	2010	2011	2012	2013
San Diego-Kearny Villa Road (cont.)						
Nitrogen Dioxide						
- Max. 1-hour Conc. (ppm) National/State	>10 ppm/ >0.18 ppm	0.060	0.073	0.073	0.057	0.067
- Annual Average (ppm) National/State	>0.053ppm/ >0.03ppm	0.013	0.013	0.012	0.011	0.010
San Diego-Overland Avenue						
Ozone						
- Days 1-hour State Std. Exceeded	>0.09 ppm ^b	2	2	1	0	-
- Max. 1-hour Conc. (ppm)		0.105	0.100	0.097	0.050	-
- Days 8-hour National Std. Exceeded	>0.075 ppm ^c	1	0	1	0	-
- Days 8-hour State Std. Exceeded	>0.07 ppm ^b	3	3	3	0	-
- Max. 8-hour Conc. (ppm)		0.82	0.074	0.087	0.047	-
PM₁₀						
- Estimated Days Over 24-hour National Std. ^d	>150 µg/m ³ ^c	0	0	0	-	-
- Estimated Days Over 24-hour State Std. ^d	>50 µg/m ³ ^b	0	0	0	-	-
- Max. 24-hour Conc. National/State (µg/m ³)		50.0/50.0	33.0/32.0	47.0/47.0	22.0/22.0	-
- State Annual Average (µg/m ³)	>20 µg/m ³ ^b	24.9	18.7	20.3	-	-
PM_{2.5}						
- Estimated Days Over 24-hour National Std. ^d	>35 µg/m ³ ^c	0	0	0	0	-
- Max. 24-hour Conc. (µg/m ³)		25.1	18.7	29.9	20.0	-
- Annual Average (µg/m ³)	>12 µg/m ³ ^b	10.5	8.7	8.9	-	-

NOTES:

Bold values are in excess of applicable standard. "NA" indicates that data is not available.

conc. = concentration; ppm = parts per million; ppb=parts per billion;

µg/m³ = micrograms per cubic meter

^a Number of days exceeded is for all days in a given year, except for particulate matter. PM10 and PM2.5 are monitored every six days.

^b State standard, not to be exceeded.

^c Federal standard, not to be exceeded.

^d Particulate matter sampling schedule of one out of every six days, for a total of approximately 60 samples per year. Estimated days exceeded mathematically estimates how many days concentrations would have been greater than the level of the standard had each day been monitored.

SOURCE: CARB, 2013b. SDAPCD, 2013b.

Suspended Particulate Matter (PM₁₀ and PM_{2.5})

PM₁₀ and PM_{2.5} represent fractions of particulate matter that can be inhaled into the air passages and the lungs and can cause adverse health effects. Some sources of particulate matter, such as wood burning in fireplaces, demolition, and construction activities, are more local in nature, while others, such as vehicular traffic, have a more regional effect. Very small particles of certain substances (e.g., sulfates and nitrates) can cause lung damage directly, or can contain adsorbed gases (e.g., chlorides or ammonium) that may be injurious to health. Particulates also can damage materials and reduce visibility. Large dust particles (diameter greater than ten microns) settle out rapidly and are easily filtered by human breathing passages. This large dust is of more concern as a soiling nuisance rather than a health hazard. The remaining fraction, PM₁₀ and PM_{2.5}, are a health concern particularly at levels above the federal and state ambient air quality standards. PM_{2.5} (including diesel exhaust particles) is thought to have greater effects on health, because these particles are so small and thus are able to penetrate to the deepest parts of the lungs. Scientific studies have suggested links between fine particulate matter and numerous health problems including asthma, bronchitis, acute and chronic respiratory symptoms such as shortness of breath and painful breathing.

Recent studies have shown an association between morbidity and mortality and daily concentrations of particulate matter in the air. Children are more susceptible to the health risks of PM₁₀ and PM_{2.5} because their immune and respiratory systems are still developing.

The concentration of PM₁₀ recorded at stations within the City of San Diego did not exceed national 24-hour standards at any of the stations. The 1110 Beardsley Street station exceeded the 24-hour state standard on 18.2 days in 2009 and six days in 2013. The Otay Mesa-Paseo International station recorded the highest number of days exceeding the state 24-hour standard at 146.4 days in 2009, 136 days in 2010, and 138.5 days in 2011 (CARB, 2013b).

Nitrogen Dioxide (NO₂)

NO₂ is a reddish brown gas that is a by-product of combustion processes. Automobiles and industrial operations are the main sources of NO₂. Aside from its contribution to ozone formation, nitrogen dioxide can increase the risk of acute and chronic respiratory disease and reduce visibility. NO₂ may be visible as a coloring component of a brown cloud on high pollution days, especially in conjunction with high ozone levels. NO₂ emissions in the SDAB follow the statewide trend of declining from 1985 to 2020. Although the maximum one-hour concentrations occasionally exceeded the ambient air quality standards in the 1980s, ambient concentrations are now well below the levels of both the state and national standards and the SDAB is considered in attainment (SDAPCD, 2013a).

Sulfur dioxide (SO₂)

SO₂ is a combustion product of sulfur or sulfur-containing fuels such as coal and diesel. SO₂ is also a precursor to the formation of atmospheric sulfate, particulate matter and contributes to potential atmospheric sulfuric acid formation that can precipitate downwind as acid rain. The maximum SO₂ concentrations recorded in the county are well below federal and state standards.

Accordingly, the county is in attainment status with both federal and state SO₂ standards. The SDAB has been in attainment for SO₂ for several years (SDAPCD, 2013a). The low level of SO₂ in the basin could be attributed to use of low-sulfur fuels in the region's electrical generators, a primary source of this pollutant in other areas of the country (SDAPCD, 2007).

Lead

Ambient lead concentrations meet both the federal and state standards in the county. Lead has a range of adverse neurotoxin health effects, and was formerly released into the atmosphere primarily via leaded gasoline products. The phase-out of leaded gasoline in California resulted in dramatically reduced levels of atmospheric lead. The SDAB is presently in attainment for lead, and the region no longer monitors for it (SDAPCD, 2013a). As the project would not produce lead, lead is not discussed further in this analysis.

Non-Criteria Air Pollutants

Toxic Air Contaminants (TACs)

Non-criteria air pollutants or TACs are airborne substances that are capable of causing short-term (acute) and/or long-term (chronic or carcinogenic, i.e., cancer causing) adverse human health effects. TACs include both organic and inorganic chemical substances. They may be emitted from a variety of common sources including gasoline stations, automobiles, diesel engines, dry cleaners, industrial operations, and painting operations. TACs are regulated differently than criteria air pollutants at both federal and state levels. At the federal level, these airborne substances are referred to as Hazardous Air Pollutants (HAPs). The state list of TACs identifies 243 substances and the federal list of HAPs identifies 189 substances.

CARB identified diesel particulate matter (DPM) as a toxic air contaminant in 1998, primarily based on evidence demonstrating cancer effects in humans. The exhaust from diesel engines includes hundreds of different gaseous and particulate components, many of which are toxic. Mobile sources such as trucks and buses are among the primary sources of diesel emissions, and concentrations of DPM are higher near heavily traveled highways and rail lines with diesel locomotive operations. The cancer risk from diesel particulate matter as determined by the CARB declined from 900 persons in one million in 1990 to 540 persons in one million in 2000 (CARB, 2009a). This calculated cancer risk value from ambient air exposure can be compared against the lifetime probability of being diagnosed with cancer in the United States, from all causes, which is approximately 40 percent, or greater than 400,000 in one million, according to the National Cancer Institute (National Cancer Institute, 2014).

Odorous Emissions

Odors are generally regarded as an annoyance rather than a health hazard. Manifestations of a person's reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting and headache). The ability to detect odors varies considerably among the population and overall is quite subjective. People may have different reactions to the same odor. An odor that is offensive to one person may be perfectly acceptable to another (e.g., coffee roaster). An unfamiliar odor is more easily detected and

is more likely to cause complaints than a familiar one. Known as odor fatigue, a person can become desensitized to almost any odor and recognition may only occur with an alteration in the intensity. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receptors. Generally, increasing the distance between the receptor and the odor source will mitigate odor impacts. However, because offensive odors rarely cause any physical harm and no requirements for their control are included in state or national air quality regulations, the SDAPCD has no rules or standards related to odor emissions, other than its nuisance rule (Rule 51).

Sensitive Receptors

Some individuals are considered to be more sensitive than others to air pollution. Reasons for greater sensitivity can include existing health problems, duration of exposure to air pollutants, or certain peoples' increased susceptibility to pollution-related health problems due to factors such as age.

Land uses such as day care centers, primary and secondary schools, hospitals, and convalescent homes are considered to be sensitive receptors to poor air quality because the very young, the old, and the infirm are more susceptible to respiratory infections and other air quality related health problems than the general public. Residential uses are considered sensitive because people in residential areas are often at home for extended periods of time; thus, they can be exposed to pollutants for extended periods. Recreational areas are considered moderately sensitive to poor air quality because vigorous exercise associated with recreation places a high demand on the human respiratory function.

C.3 Regulatory Setting

Regulation of air pollution is achieved through both national and state ambient air quality standards and through emissions limits on individual sources of air pollutants. Local Air Quality Management Districts (AQMDs) and Air Pollution Control Districts (APCDs) are responsible for demonstrating attainment with state air quality standards through the adoption and enforcement of Attainment Plans.

Federal

Criteria Air Pollutants

The Federal Clean Air Act (CAA) requires the U.S. Environmental Protection Agency (U.S. EPA) to identify National Ambient Air Quality Standards (NAAQS), or (national standards) to protect public health and welfare. National standards have been established for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, respirable particulate matter (PM₁₀ and PM_{2.5}), and lead. These pollutants are called “criteria” air pollutants because standards have been established for each of them to meet specific public health and welfare criteria set forth in the CAA. California has adopted more stringent ambient air quality standards for the criteria air pollutants (referred to as State Ambient Air Quality Standards, or state standards) and has adopted air quality standards for some pollutants for which there is no corresponding national standard. **Table 3.C-2** presents current

**TABLE 3.C-2
STATE AND NATIONAL CRITERIA AIR POLLUTANT STANDARDS, EFFECTS, AND SOURCES**

Pollutant	Averaging Time	State Standard	National Standard	Pollutant Health and Atmospheric Effects	Major Pollutant Sources
Ozone	1 hour	0.09 ppm	---	High concentrations can directly affect lungs, causing irritation. Long-term exposure may cause damage to lung tissue.	Formed when reactive organic gases (ROG) and nitrogen oxides (NO _x) react in the presence of sunlight. Major sources include on-road motor vehicles, solvent evaporation, and commercial / industrial mobile equipment.
	8 hours	0.07 ppm	0.075 ppm		
Carbon Monoxide	1 hour	20 ppm	35 ppm	Classified as a chemical asphyxiant, carbon monoxide interferes with the transfer of fresh oxygen to the blood and deprives sensitive tissues of oxygen.	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hours	9.0 ppm	9 ppm		
Nitrogen Dioxide	1 hour	0.18 ppm	100 ppb	Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown.	Motor vehicles, petroleum refining operations, industrial sources, aircraft, ships, and railroads.
	Annual Avg.	0.030 ppm	0.053 ppm		
Sulfur Dioxide	1 hour	0.25 ppm	75 ppb	Irritates upper respiratory tract; injurious to lung tissue. Can yellow the leaves of plants, destructive to marble, iron, and steel. Limits visibility and reduces sunlight.	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	3 hours	---	0.5 ppm		
	24 hours	0.04 ppm	0.14 ppm		
	Annual Avg.	---	0.030 ppm		
Respirable Particulate Matter (PM ₁₀)	24 hours	50 ug/m ³	150 ug/m ³	May irritate eyes and respiratory tract, decreases in lung capacity, cancer and increased mortality. Produces haze and limits visibility.	Dust and fume-producing industrial and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	Annual Avg.	20 ug/m ³	---		
Fine Particulate Matter (PM _{2.5})	24 hours	---	35 ug/m ³	Increases respiratory disease, lung damage, cancer, and premature death. Reduces visibility and results in surface soiling.	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning; Also, formed from photochemical reactions of other pollutants, including NO _x , sulfur oxides, and organics.
	Annual Avg.	12 ug/m ³	12.0 ug/m ³		
Lead	Monthly Ave.	1.5 ug/m ³	---	Disturbs gastrointestinal system, and causes anemia, kidney disease, and neuromuscular and neurological dysfunction.	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	Quarterly	---	1.5 ug/m ³		
Hydrogen Sulfide	1 hour	0.03 ppm	No National Standard	Nuisance odor (rotten egg smell), headache and breathing difficulties (higher concentrations)	Geothermal Power Plants, Petroleum Production and refining
Sulfates	24 hour	25 ug/m ³	No National Standard	Breathing difficulties, aggravates asthma, reduced visibility	Produced by the reaction in the air of SO ₂ .
Visibility Reducing Particles	8 hour	Extinction of 0.23/km; visibility of 10 miles or more	No National Standard	Reduces visibility, reduced airport safety, lower real estate value, and discourages tourism.	See PM _{2.5} .

ppm = parts per million; ug/m³ = micrograms per cubic meter.

SOURCE: CARB, 2013c.

national and state ambient air quality standards and provides a brief discussion of the related health effects and principal sources for each pollutant.

Pursuant to the 1990 Federal CAA Amendments (FCAAA), the U.S. EPA classifies air basins (or portions thereof) as “attainment” or “nonattainment” for each criteria air pollutant, based on whether or not the NAAQS had been achieved. **Table 3.C-3** shows the current attainment status of the San Diego Air Basin.

**TABLE 3.C-3
SAN DIEGO AIR BASIN ATTAINMENT STATUS**

Pollutant	Designation/Classification	
	Federal Standards	State Standards
Ozone – one hour	No Federal Standard ¹	Nonattainment
Ozone – eight hour	Nonattainment	Nonattainment
PM10	Unclassified	Nonattainment
PM2.5	Unclassified/Attainment	Nonattainment
CO	Unclassified/Attainment	Attainment
Nitrogen Dioxide	Unclassified/Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Lead	Unclassified/Attainment	Unclassified/Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified

¹ Effective June 15, 2005, the U.S. Environmental Protection Agency (EPA) revoked the federal 1-hour ozone standard, including associated designations and classifications. EPA had previously classified the SJVAB as extreme nonattainment for this standard. EPA approved the 2004 Extreme Ozone Attainment Demonstration Plan on March 8, 2010 (effective April 7, 2010). Many applicable requirements for extreme 1-hour ozone nonattainment areas continue to apply to the SJVAB.

SOURCE: CARB. 2013d; USEPA 2015.

The Federal CAA requires each state to prepare an air quality control plan referred to as the State Implementation Plan (SIP). The CAA added requirements for states containing areas that violate the NAAQS to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is a living document that is periodically modified to reflect the latest emissions inventories, planning documents, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The U.S. EPA has responsibility to review all state SIPs to determine if they conform to the mandates of the CAA and will achieve air quality goals when implemented. If the U.S. EPA determines a SIP to be inadequate, it may prepare a Federal Implementation Plan (FIP) for the nonattainment area and may impose additional control measures.

Failure to submit an approvable SIP or to implement the plan within mandated timeframes can result in sanctions being applied to transportation funding and stationary air pollution sources in the air basin.

Toxic Air Contaminants

TACs are regulated under both state and federal laws. Federal laws use the term “Hazardous Air Pollutants” (HAPs) to refer to the same types of compounds that are referred to as TACs under state law. Both terms encompass essentially the same compounds. The 1977 FCAAA required the U.S. EPA to identify National Emission Standards for Hazardous Air Pollutants (NESHAPs) to protect public health and welfare. These substances include certain volatile organic chemicals, pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals. Under the 1990 FCAAA, 189 substances are regulated as HAPs.

State

Criteria Air Pollutants

CARB, a department of the California Environmental Protection Agency, oversees air quality planning and control throughout California. CARB is responsible for coordination and oversight of state and local air pollution control programs in California and for implementation of the California Clean Air Act (CCAA). The CCAA, which was adopted in 1988, requires CARB to establish the California Ambient Air Quality Standards (CAAQS). CARB has established CAAQS for sulfates, hydrogen sulfide, vinyl chloride, visibility-reducing particulate matter, and the above-mentioned criteria air pollutants. Applicable CAAQS are shown in Table 3.C-2.

The CCAA requires all local air districts in the state to endeavor to achieve and maintain the CAAQS by the earliest practical date. The act specifies that local air districts shall focus particular attention on reducing the emissions from transportation and area-wide emission sources, and provides districts with the authority to regulate indirect sources.

Among CARB’s other responsibilities are overseeing compliance by local air districts with California and federal laws; approving local air quality plans; submitting SIPs to USEPA; monitoring air quality; determining and updating area designations and maps; and setting emissions standards for new mobile sources, consumer products, small utility engines, off-road vehicles, and fuels.

Toxic Air Contaminants

Air quality regulations also focus on TACs. In general, for those TACs that may cause cancer, there is no concentration that does not present some risk. In other words, there is no safe level of exposure. This contrasts with the criteria air pollutants, for which acceptable levels of exposure can be determined and for which the ambient standards have been established. Instead, USEPA and CARB regulate HAPs and TACs, respectively, through statutes and regulations that generally require the use of the MACT or best available control technology (BACT) for toxics and to limit emissions. These statutes and regulations, in conjunction with additional rules set forth by the districts, establish the regulatory framework for TACs.

TACs in California are regulated primarily through the Tanner Air Toxics Act (Assembly Bill [AB] 1807 [Chapter 1047, Statutes of 1983]) and the Air Toxics Hot Spots Information and Assessment Act (Hot Spots Act) (AB 2588 [Chapter 1252, Statutes of 1987]). AB 1807 sets forth a formal procedure for CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before CARB can designate a substance as a TAC. To date, CARB has identified more than 21 TACs and adopted USEPA's list of HAPs as TACs. Most recently, diesel PM was added to the CARB list of TACs. Once a TAC is identified, CARB then adopts an airborne toxics control measure (ATCM) for sources that emit that particular TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate BACT to minimize emissions.

The Air Toxics Hot Spots Information and Assessment Act requires existing facilities emitting toxic substances above a specified level to prepare a toxic-emission inventory, prepare a risk assessment if emissions are significant, notify the public of significant risk levels, and prepare and implement risk reduction measures.

CARB published the Air Quality and Land Use Handbook: A Community Health Perspective (Handbook), which provides guidance concerning land use compatibility with TAC sources (CARB, 2005). Although it is not a law or adopted policy, the Handbook offers advisory recommendations for the siting of sensitive receptors near uses associated with TACs, such as freeways and high-traffic roads, commercial distribution centers, rail yards, ports, refineries, dry cleaners, gasoline stations, and industrial facilities, to help keep children and other sensitive populations out of harm's way.

San Diego Air Pollution Control District

SDAPCD is the agency responsible for protecting the public health and welfare through the administration of federal and state air quality laws and policies. Included in SDAPCD's tasks are the monitoring of air pollution, the preparation of San Diego County's portion of the SIP, and the promulgation of rules and regulations. The SIP includes strategies and tactics to be used to attain and maintain acceptable air quality in the County; this list of strategies is called the San Diego Regional Air Quality Strategy (RAQS) (SDAPCD, 2009). The rules and regulations include procedures and requirements to control the emission of pollutants and prevent significant adverse impacts.

The following SDAPCD rules and regulations apply to new construction:

- **Regulation IV: Prohibitions; Rule 51: Nuisance.** Prohibits the discharge, from any source, of such quantities of air contaminants or other materials that cause or have a tendency to cause injury, detriment, nuisance, annoyance to people and/or the public, or damage to any business or property.
- **Regulation IV: Prohibitions; Rule 55: Fugitive Dust.** Regulates fugitive dust emissions from any commercial construction or demolition activity capable of generating fugitive dust emissions, including active operations, open storage piles, and inactive disturbed areas, as well as track-out and carry-out onto paved roads beyond a project site.

- **Regulation IV: Prohibitions; Rule 67.0:** Architectural Coatings. Requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce volatile organic compound (VOC) emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.

The RAQS contains six Transportation Control Measures that are consistent with program commitments made in the 2007 Regional Transportation Plan (RTP) and the 2006 Regional Transportation Improvement Program (RTIP) adopted and implemented by SANDAG. The six RAQS Transportation Control Measures relate to: (1) Transit Improvements; (2) Vanpools; (3) High-Occupancy Vehicle (HOV) Lanes; (4) Park-and-Ride Facilities; (5) Bicycle Facilities; and (6) Traffic Signal Improvements. SDAPCD's Indirect Source Program, adopted by the District Board in December 1997, consists of ongoing outreach and assistance to local governments, land developers, and neighborhood groups to reduce vehicle trips and associated emissions through voluntary land use and street design improvements (i.e., "smart growth") (SDAPCD, 2009).

SDAPCD provides ongoing technical assistance to SANDAG on programs to encourage smart growth. SDAPCD also provided technical assistance to the City of San Diego in revising their General Plan, Pedestrian Master Plan and traffic calming programs to reflect greater reliance on transit and non-motorized transportation modes. SDAPCD has also conducted public workshops and other forms of public outreach focused on improving the conditions for pedestrians, bicyclists, and transit.

San Diego General Plan

The City's General Plan, updated in 2008, sets out a long-range vision and comprehensive policy framework for how the City should grow and develop, provide public services, and maintain the qualities that define San Diego over the next 20 to 30 years.

Relevant General Plan Policies

The following policies of the Conservation Element of the General Plan specifically address air quality:

- CE-F.1 Develop and adopt a fuel efficiency policy to reduce fossil fuel use by City departments, and support community outreach efforts to achieve similar goals in the community.
- CE-F.2 Continue to upgrade energy conservation in City buildings and support community outreach efforts to achieve similar goals in the community.
- CE-F.3 Continue to use methane as an energy source from inactive and closed landfills.
- CE-F.4 Preserve and plant trees, and vegetation that are consistent with habitat and water conservation policies and that absorb carbon dioxide and pollutants.
- CE-F.5 Promote technological innovations to help reduce automobile, truck, and other motorized equipment emissions.
- CE-F.6 Encourage and provide incentives for the use of alternatives to single-occupancy vehicle use, including using public transit, carpooling, vanpooling, teleworking,

bicycling, and walking. Continue to implement programs to provide City employees with incentives for the use of alternatives to single-occupancy vehicles.

CE-F.7 Influence the development of state, federal, and local actions to increase the use of alternative fuels.

CE-F.8 Influence the development of state, federal, and local efforts to increase fuel efficiency and reduce greenhouse gas emissions.

C.4 Impacts and Mitigation Measures

Significance Criteria

According to the City of San Diego's CEQA Significance Determination Thresholds (City of San Diego, 2011), a significant impact with regard to air quality could occur if implementation of the CAP would:

- Result in a conflict with or obstruct implementation of the applicable air quality plan;
- Result in a violation of any air quality standard or contribute substantially to an existing or projected air quality violation;
- Expose sensitive receptors to substantial pollutant concentrations;
- Create objectionable odors affecting a substantial number of people;
- Exceed 100 pounds per day of Particulate Matter (PM)(dust); or
- Result in the substantial alteration of air movement in the area of the project.

The Significance Determination Thresholds note that San Diego is designated "non-attainment" for ozone and particulate matter, and that CEQA review should include measures to reduce project-related ozone and particulate matter emissions to ensure that new developments do not contribute to San Diego's non-attainment status for these pollutants. The Significance Determination Thresholds provides the following screening criteria for projects that have the potential for increasing air emissions. Projects that do not meet these criteria (that is, that are smaller or would result in lower emissions) may be considered not to have significant emissions:

1. 950 Single-Family Units/9,500 Average Daily Trips (ADT);
2. 500 Single-Family Units/5,000 ADT, if the units include wood-burning fireplaces;
3. Level of Service Degradation for Roads;
4. 100 Pounds per Day PM10 (Airborne Dust) Criteria;
5. Stationary Sources.

Impact Analysis

As indicated in Table 2-5 in Chapter 2, Project Description, several of the CAP strategies, actions, and supporting measures could have an impact on air quality. Many of these could encourage the construction of new or remodeled facilities that could result in construction-related air emissions.

The following proposed CAP Actions only have the potential to impact air quality from construction related emissions:

- **Action 1.5 Outdoor Landscaping Ordinance.** Supporting measures and steps that support implementation of this action could result in the construction of new or expansion of existing water recycling facilities and infrastructure, including potential modifications to wastewater treatment plants, installation of recycled water delivery systems, monitoring systems, etc.
- **Action 2.2 Municipal Zero Emissions Vehicles.** These actions could result in construction activities associated with development of electrical charging and other fueling infrastructure which could have an effect on air quality.
- **Action 2.3 Convert Municipal Waste Collection Trucks to Low Emission Fuel.** These actions could result in construction activities associated with development fueling infrastructure which could have an effect on air quality.
- **Action 3.2 Implement the City's Pedestrian Master Plan in Transit Priority Areas.** These actions would result in renovations and retrofits of existing sidewalks, cross-walks, and pedestrian trails as well of construction of new pedestrian facilities that may result in short-term construction related impacts, and changes to circulation that could affect air quality.
- **Action 3.3 Implement the City's Bicycle Master Plan.** These actions would result in renovations and retrofits of existing bike lanes and construction of new bike lanes and facilities that may result in short-term construction impacts and long-term effects on traffic and circulation that could affect air quality.
- **Action 3.5 Implement a Roundabouts Master Plan.** These actions would lead to short-term construction impacts and operational changes to traffic circulation that may affect air quality.

The following proposed CAP Actions could impact air quality in other ways, as summarized below and discussed under Issue 2:

- **Action 2.1 Community Choice Aggregation Program or Similar Program and Action 4.2 Capture Methane from Wastewater Treatment.** These actions could directly or indirectly lead to the construction and operation of large-scale renewable energy facilities, such as biomass or biogas conversion facilities, that have the potential for emissions of criteria pollutants, odors, and TACs.
- **Action 3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas and Action 3.6 Implement Transit-Oriented Development within Transit Priority Areas.** These actions would facilitate implementation of the City of Villages strategy and focus development in Transit Priority Areas. While this is intended to reduce vehicle miles travelled and to promote use of mass transit, walking, and bicycling, it may also result in short-term construction-related emission and long-term creation of localized pollution hotspots and exposure of sensitive receptors to nearby pollution sources.
- **Action 4.1 Divert Solid Waste and Capture Landfill Emissions.** This Action may result in new or expanded recycling and organics collection and processing programs and facilities, which could result in increased emissions of criteria pollutants, dust, and odors.

- **Action 5.1 Present to City Council for consideration a city-wide Urban Tree Planting Program.** The goal of this action is to achieve 15 percent urban canopy cover by 2020 and 35 percent urban canopy cover by 2035.

Issue 1: Would implementation of the CAP affect the ability of the RAQS to meet the federal and state clean air standards, or conflict with implementation of other regional air quality plans?

The SDAPCD RAQS is the regional air quality plan that is applicable to the City of San Diego. The RAQS contains rules and regulations that are implemented by the SDAPCD to help the region meet the clean air standards required by federal and state law. The RAQS relies on projected growth in the County as well as mobile, area and other sources of emissions, as obtained from CARB and SANDAG to project future emissions within the County. Based on these emissions, reduction strategies are determined to reduce emissions in order to achieve or maintain attainment with State and Federal standards. CARB mobile source emissions projections and SANDAG growth projections are based on information provided by city and County general plans. Therefore, projects that propose development that is consistent with the applicable general plan would be consistent with the RAQS. If the project's growth exceeds the projections anticipated in the general plan then the project would conflict with the RAQS and the SIP. The CAP does not include any proposed strategies or actions that would increase growth beyond that anticipated in the City's General Plan.

The purpose of the CAP is to reduce GHG emissions and mitigate for the negative effects of global climate change. Strategies in the CAP would involve activities to reduce energy consumption, increase renewable energy generation, reduce vehicle use and vehicle miles traveled, increase alternative fuel vehicle use, and increase solid waste vehicle fuel efficiency. These activities would have a beneficial effect on air quality by reducing the use of sources of air pollution and improving ambient air quality overall.

As the CAP includes reduction strategies that would reduce air emission, it would have a beneficial impact on air quality in the City compared to conditions without the Project. Implementation of the CAP would not affect the ability of the RAQS to meet the federal and state clean air standards, or conflict with implementation of other regional air quality plan. The CAP supports the land use patterns and transportation improvements in the SANDAG RTP/SCS and the City's General Plan. In doing so, the CAP supports the primary goals of the RAQS and therefore would not conflict with or obstruct implementation of the primary goals of an applicable air quality plan.

Significance of Impact

Overall, the implementation of the CAP provides beneficial impact.

Mitigation Framework

No mitigation is required.

Issue 2: Would implementation of the CAP result in air emissions that would substantially deteriorate ambient air quality, including the exposure of sensitive receptors to substantial pollutant concentrations?

As noted above, several proposed CAP actions have the potential to result in construction emissions, operational emissions, or both. Emissions associated with proposed CAP actions may be mobile emissions (from increased vehicle use or use of mobile construction equipment), stationary sources (such as may occur from operation of energy generation facilities and waste processing facilities), and area sources, such as fugitive dust emissions from construction sites. The following discussion examines the potential for proposed CAP actions to result in significant air emissions during construction and operation.

Construction

As noted above, implementation of several of the proposed CAP actions which entail new or remodeled construction could result in short-term construction-related air emissions. Some proposed CAP actions and supporting measures under Strategy 1, Energy and Water Efficient Buildings, involve minor construction activities, such as energy and water efficiency upgrades to existing buildings that are not expected to result in substantial construction emissions. The proposed CAP actions that are likely to result in construction emissions are Actions 1.5, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 3.5, 3.6, and 4.2.

Several of these actions, if implemented, could result in relatively large construction projects, such as development of large-scale renewable energy facilities under Action 2.1; in-fill development and redevelopment within Transit Priority Areas, facilitated by Actions 3.1 and 3.6; and new or expanded wastewater and solid waste processing facilities under Actions 4.1 and 4.2.

Construction activities result in short-term increases in emissions of ozone-precursor pollutants (i.e., ROG and NO_x) and emissions of PM. Emissions of ozone precursors result from the operation of on-road and off-road motorized vehicles and equipment associated with construction activities. Emissions of airborne PM are largely associated with ground-disturbing activities, such as those occurring during site preparation. Localized concentrations of construction-generated TAC emissions, including emissions of DPM from diesel-powered equipment, can increase health risk for nearby sensitive receptors.

The Significance Determination Thresholds (City of San Diego, 2011) notes that the 100 pounds per day PM₁₀ screening criteria may be associated with construction projects that involve grading of four acres per day without dust controls. Demolition of existing structures also has the potential for high dust potential.

Proposed CAP actions expected to result in construction activities that would disturb less than four acres per day, not involve substantial demolition of existing structures, only have a temporary effect on intersection level of service, and involve limited use of diesel-powered equipment include proposed CAP Action 2.2 Municipal Zero Emissions Vehicles, Action 2.3 Convert Municipal Waste Collection Trucks to Low Emission Fuel, Action 3.2 Implement the City's Pedestrian Master Plan in Transit Priority Areas, Action 3.3 Implement the City's Bicycle

Master Plan, Action 3.5 Implement a Roundabouts Master Plan, and small-scale, distributed renewable energy facilities developed as an indirect result of Action 2.1 Community Choice Aggregation. Each project undertaken pursuant to these proposed CAP actions would not result in significant construction-related emissions. However, it is possible that several small-scale construction activities could be underway simultaneously in the City that together may involve grading of four or more acres of land. Therefore, the potential exists for a significant air quality impact from implementation of these CAP actions.

The only proposed CAP actions likely to involve individual construction projects of sufficient scale to involve grading of at least four acres per day, substantial demolition of existing structures, substantial reduction of roadway level of service, and substantial use of diesel-powered equipment are those that facilitate implementation of the City of Villages strategy (Actions 3.1 and 3.6); and those that may involve construction or expansion of major infrastructure projects (Actions 1.5, 2.1, 4.1, and 4.1). Depending on the scale and intensity of construction activities taking place as a result of implementation of these actions, they could result in significant construction-related air emissions.

Operations

Implementation of several proposed CAP actions could result in operations-related emissions. These include Actions 2.1, 3.1, 3.6, 4.1, and 4.2. While the intent of the City of Villages strategy is to reduce reliance on the automobile and therefore reduce emissions, it would also result in concentrated, mixed-use development close to transit facilities. This may result in locating residences and other sensitive receptors close to existing emissions sources, and for localized increases in traffic-related emissions. Proposed CAP actions 3.1 and 3.6 would facilitate implementation of the City of Villages strategy, and may result in development that would exceed one or more of the significance screening criteria noted in the Significance Thresholds discussion, above, including more than 950 Single-Family Units/9,500 ADT, or 500 Single-Family Units with wood-burning fireplaces/5,000 ADT; specified Level of Service Degradation for Roads; and Stationary Sources. As noted in the Final Program Environmental Impact Report for the City's 2008 General Plan update (General Plan PEIR), implementation of the City of Villages strategy may result in significant air emissions. Other proposed CAP actions would increase use of alternative modes of transportation, including bicycling and walking, and would improve traffic flow through timing of traffic lights and installation of traffic roundabouts. These would tend to reduce emissions associated with implementation of the City of Villages strategy.

Proposed CAP Action 2.1 Community Choice Aggregation Program may result in development of large-scale renewable energy facilities. These may include combustion (biomass, biogas) facilities that would be considered stationary sources, and which may therefore result in significant operational air emissions. Large-scale solar and wind power facilities would not be considered a stationary source and are not associated with substantial operational emissions. Typically operational activities associated with these facilities include occasional maintenance and washing of solar panels. Operation of renewable energy facilities that do not entail stationary sources would not have the potential for a significant operational air emissions impact.

Proposed CAP Action 4.1 Divert Solid Waste and Capture Landfill Emissions and Action 4.2 Methane Capture from Wastewater Treatment Plants both may involve operation of new or expanded facilities, including composting facilities, methane or biogas generation, capture, and combustion facilities that may emit criteria pollutants and TACs, and solid waste processing facilities that have the potential to produce dust and odors. These facilities would likely be considered stationary sources and therefore would have the potential for significant air emissions impacts.

Proposed CAP Action 4.1 Divert Solid Waste and Capture Landfill Emissions, may result in specific measures that would change solid waste collection and handling in the City. Supporting measures for this action include change to weekly collection of recycling and greenwaste, and addition of food scraps to the greenwaste collection program. These would result in the increase in the number of weekly collections serving each household or business, and a substantial increase in VMT by collection vehicles, and therefore the potential for increased air emissions. Proposed CAP Action 2.3 Conversion of Waste Collection Vehicles to Alternative Fuel would reduce emissions rates for collection vehicles, and would partially or completely offset the increase in collection vehicle VMT. However, the conversion would not be complete until 2035. Furthermore, this action only addresses collection vehicles. Proposed CAP Action 4.1 may also result in the use of new or different waste processing facilities, such as composting facilities, anaerobic digesters, and material recovery facilities. In some instances, the haul distance to these facilities from local transfer stations may be longer than the current haul distance. This could result in increased VMT by diesel powered long-haul trucks and increased air emissions. This could also result in significant air emissions.

Proposed CAP Action 5.1 Present to City Council an Urban Tree Planting Program would result in greater urban tree canopy in the City. Trees absorb CO₂ as well as other air pollutants, including PM, ozone, Nitrogen Dioxide, and Sulfur Dioxide (Nowak, 2002). Proposed CAP Action 5.1 would improve ambient air quality in the City by removing air pollutants.

Significance of Impact

As described above, construction associated with implementation of most of the proposed CAP actions individually does not have the potential to result in substantial air emissions. However, simultaneous implementation of multiple small projects pursuant to CAP actions, and implementation of actions involving large-scale construction, could result in significant construction-related emissions.

In addition, the potential for proposed CAP Action 4.1 Divert Solid Waste and Capture Landfill Emissions has the potential to result in a significant impact from increased VMT by waste collection and waste hauling vehicles.

As discussed above, implementation of the City of Villages strategy, as facilitated by the CAP, has the potential to result in significant impacts to air quality. However, because the City of Villages strategy is already City policy, and because it was already the subject of environmental

review (the General Plan PEIR), potential impacts associated with implementation of the City of Villages have already been addressed in the General Plan PEIR.

Also as noted above, development of large-scale renewable energy facilities, water recycling facilities, and waste processing facilities could potentially result in significant air impacts during construction and operation. The CAP contains no specific plans for developing such facilities, but only anticipates that they may be developed in the future, and such impacts would be site- and project-specific. The City's process for the evaluation of discretionary projects includes environmental review and documentation pursuant to CEQA as well as an analysis of those projects' consistency with the goals, policies, and recommendations of the General Plan. As future environmental analysis would be required for specific public utilities projects necessary to implement the CAP, air quality impacts associated with construction and operation of new or substantially altered facilities would be addressed at the project-level. Furthermore, new or revised stationary sources, such as those that may occur with implementation of proposed CAP Action 2.1 Community Choice Aggregation, Action 4.1 Divert Solid Waste and Capture Landfill Emissions, and Action 4.2 Methane Capture from Wastewater Treatment Plants, would be subject to permitting by the SDAPCD. The permitting process requires detailed emissions modeling and establishes emission limits for each pollutant. Stationary source permits are issued if the new or revised source will not result in emissions that will interfere with achievement of the RAQS.

Mitigation Framework

Mitigation Measure AIR-1: Best Available Control Measures for Construction Emissions

This mitigation measure incorporates the Mitigation Framework for construction-related air impacts contained in the General Plan PEIR, which states the following:

For projects that may exceed daily construction emissions established by the City of San Diego, Best Available Control Measures will be incorporated to reduce construction emissions to below daily emission standards established by the City of San Diego. Project proponents must prepare and implement a Construction Management Plan which includes but is not limited to Best Available Control Measures. Appropriate control measures will be determined on a project-by-project basis, and are specific to the pollutant for which the daily threshold may be exceeded. Control measures may include:

- Minimizing simultaneous operation of multiple construction equipment units;
- Use of low pollutant emitting equipment;
- Use of catalytic reduction for gasoline-powered equipment;
- Watering the construction area to minimize fugitive dust; and
- Minimizing idling time by construction vehicles.

Mitigation Measure AIR-2: Reduce Emissions from Expanded Recycling and Organics Collection Programs

To ensure that increased VMT resulting from implementation of CAP Action 4.1 does not result in significant air emissions, collection vehicles shall be converted to alternative fuels,

such as natural gas, during roll-out of the expanded program, such that combined emissions fall below the significance threshold for daily and annual NO_x emissions. This will be confirmed using generally accepted air emissions modeling, such as the CalEEMod model. In addition, to the extent that new programs increase VMT for long-haul vehicles, these vehicles shall also be converted to alternative fuels, such as natural gas, such that any increase falls below the significance threshold for daily and annual NO_x emissions.

Significance after Mitigation

Implementation of the Mitigation Measure AIR-1 for construction activities associated with CAP actions involving small-scale construction would be sufficient to reduce construction emissions to less than significant. Mitigation Measure AIR-2 would reduce emissions associated with increased VMT from waste collection and waste hauling vehicles. This measure would reduce the impact of proposed CAP Action 4.1 to less than significant.

Air quality impacts associated with construction and operation of large facilities that could be proposed as a part of CAP Action 2.1 would remain significant even with implementation of Mitigation Measure AIR-1. Because the degree of air quality impacts associated with construction and operation of large facilities cannot be accurately predicted, and because the applicability, feasibility, and success of AIR-1 cannot be accurately predicted for large facilities, the program-level impact related to air quality is considered significant and unavoidable.

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D. Greenhouse Gases

D.1 Introduction

This section analyzes potential greenhouse gas related impacts that could result from implementation of the City of San Diego (City) Climate Action Plan (CAP).

D.2 Environmental Setting

Greenhouse Gases and Climate Change

“Global warming” and “global climate change” are the terms used to describe the observed increase in the average temperature of the earth’s near-surface air and oceans since the mid-20th century and its projected continuation. Warming of the climate system is now considered to be unequivocal (IPCC, 2013), with global surface temperature increasing approximately 1.33 degrees Fahrenheit (°F) over the last 100 years. Continued warming is projected to increase global average temperature between two and 11°F over the next 100 years.

GHGs play a critical role in determining the Earth’s surface temperature. Solar radiation enters the Earth’s atmosphere from space, and a portion of the radiation is absorbed by the Earth’s surface. Earth re-radiates this energy back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. GHGs, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation (that otherwise would have escaped back into space) is now retained in the atmosphere, and results in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on Earth. Without the greenhouse effect, the Earth would not be able to support life as we know it.

Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), chlorofluorocarbons (CFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). Much of the scientific literature suggests that human-caused emissions of these GHGs in excess of natural ambient concentrations are responsible for intensifying the greenhouse effect and have led to a trend of unnatural warming of the Earth’s climate, known as global climate change or global warming. While there is some debate regarding this issue, it is unlikely that global climate change of the past 50 years can be explained without contribution from human activities (IPCC, 2013).

CO₂ equivalent (CO₂e) is a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. Expressing emissions in CO₂e takes the contributions to the greenhouse effect of all GHG emissions and converts them to the equivalent effect that would occur if only CO₂ were being emitted. This measurement, known as the global warming potential (GWP) of a GHG, is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. For example, as described in Appendix B, Calculation References Methods for Estimating Greenhouse Gas

Reductions, of the General Reporting Protocol of the California Climate Action Registry, one ton of CH₄ has the same contribution to the greenhouse effect as approximately 25 tons of CO₂ (IPCC, 2007). Therefore, CH₄ is a much more potent GHG than CO₂.

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one year to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of any particular GHG molecule is dependent on multiple variables and cannot be pinpointed, it is understood that more CO₂ is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, and other forms of sequestration. Of the total annual human-caused CO₂ emissions, approximately 54 percent is sequestered through ocean uptake, uptake by northern hemisphere forest regrowth, and other terrestrial sinks within one year, whereas the remaining 46 percent of human-caused CO₂ emissions remains stored in the atmosphere (Seinfeld and Pandis, 1998).

Similarly, impacts of GHGs are borne globally, as opposed to localized air quality effects of criteria air pollutants and toxic air contaminants. The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; however, it is clear that the quantity is enormous, and no single project would measurably contribute to a noticeable incremental change in the global average temperature, or to global, local, or micro climates. From the standpoint of CEQA, GHG impacts to global climate change are inherently cumulative.

Greenhouse Gas Emission Sources

According to the majority of the scientific literature on this topic, emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the transportation, industrial/manufacturing, utility, residential, commercial, and agricultural sectors (CARB, 2014a). Emissions of CO₂ are a largely a byproduct of fossil fuel combustion. Methane, a highly potent GHG, results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices and landfills. Nitrous oxide is also largely attributable to agricultural practices and soil management. Carbon dioxide sinks, or reservoirs, include vegetation and the ocean, which absorb CO₂ through sequestration and dissolution, respectively, two of the most common processes of CO₂ sequestration.

Impacts of Climate Change

Potential global warming impacts in California may include, but are not limited to, loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more frequent and long-lasting droughts. Secondary effects are likely to include the displacement of thousands of coastal businesses and residences, reduced potable water supply, lower crop yields, changes in disease vectors, and impacts to habitat and biodiversity. As the California Air Resources Board (CARB) *Climate Change Scoping Plan* noted, the legislature in enacting Assembly Bill (AB) 32 found that global warming would cause detrimental effects to

some of the state's largest industries, including agriculture, winemaking, tourism, skiing, commercial and recreational fishing, forestry, and the adequacy of electrical power generation. The *Climate Change Scoping Plan* states as follows: "The impacts of global warming are already being felt in California. The Sierra snowpack, an important source of water supply for the state, has shrunk ten percent in the last 100 years. It is expected to continue to decrease by as much as 25 percent by 2050. World-wide changes are causing sea levels to rise – about eight inches of increase has been recorded at the Golden Gate Bridge over the past 100 years – threatening low coastal areas with inundation and serious damage from storms" (CARB, 2008).

Ecosystem and Biodiversity Impacts

Climate change is expected to impact a broad range of ecosystems, from alpine to deep-sea habitat (U.S. EPA, 2014). As temperatures and precipitation change, seasonal shifts in vegetation would occur; this could affect the distribution of associated flora and fauna species. As the range of species shifts, habitat fragmentation could occur, with acute impacts on the distribution of certain sensitive species. The IPCC states that "20 percent to 30 percent of species assessed may be at risk of extinction from climate change impacts within this century if global mean temperatures exceed two to three degrees celsius (3.6 to 5.4°F) relative to pre-industrial levels" (IPCC, 2007). Shifts in existing biomes could also make ecosystems vulnerable to encroachment by invasive species. Wildfires, which are an important control mechanism in many ecosystems, may become more severe and more frequent, making it difficult for native plant species to repeatedly re-germinate. In general terms, climate change is expected to put a number of stressors on ecosystems, with potentially catastrophic effects on biodiversity.

Human Health Impacts

Climate change may increase the number of heat-related illnesses and deaths, and warmer temperatures could increase the concentrations of unhealthy air and water pollutants. Changes in temperature, precipitation patterns, and extreme events could enhance the spread of some diseases, particularly vector-borne infectious diseases found in tropical areas and spread by insects such as malaria, dengue fever, West Nile Virus, and encephalitis (U.S. EPA, 2013). While these health impacts would largely affect tropical areas in other parts of the world, effects would also be felt in California. Warming of the atmosphere would be expected to increase smog and particulate pollution, which could adversely affect individuals with heart and respiratory problems, such as asthma. Extreme heat events would also be expected to occur with more frequency and could adversely affect the elderly, children, and the homeless. Finally, the water supply impacts and seasonal temperature variations expected as a result of climate change could affect the viability of existing agricultural operations, making the food supply more vulnerable.

Greenhouse Gas Emissions Estimates

Global Emissions

Worldwide emissions of GHGs in 2004 were 30 billion tons of CO₂e per year (UNFCCC, 2012). This includes both ongoing emissions from industrial and agricultural sources, but excludes emissions from land use changes. In 2011, the atmospheric concentration of CO₂ was estimated at

approximately 390 parts per million (ppm), or about 40 percent greater than in 1750 (IPCC, 2013).

U.S. Emissions

In 2009, the United States emitted about 6.7 billion tons of CO₂e or about 21 tons per year per person. Of the four major sectors nationwide — residential, commercial, industrial, and transportation — transportation accounts for the highest fraction of GHG emissions (approximately 33 percent); these emissions are entirely generated from direct fossil fuel combustion (U.S. EPA, 2011).

State of California Emissions

California is the 12th to 16th largest emitter of CO₂ in the world (CEC, 2006). California produced approximately 459 million gross metric tons of CO₂e in 2012 (CARB, 2014a). Combustion of fossil fuel in the transportation sector was the single largest source of California's GHG emissions in 2012, accounting for 36 percent of total GHG emissions in the state. This sector was followed by the electric power section (including both in-state and out-of-state sources) (21 percent) and the industrial sector (19 percent) (CARB, 2014a).

City of San Diego Emissions

In response to the State's efforts and to ensure the City of San Diego contributes its fair share to statewide GHG reductions, the City prepared the CAP that identifies measures to effectively meet GHG reduction targets for 2020, as well as 2035 which serves as an "interim" target toward meeting the state's longer term 2050 target. The CAP contains five chapters: Background, Reducing Emissions, Implementation and Monitoring, Social Equity and Job Creation, and Adaptation.

The GHG emissions inventory evaluated energy and other emissions-related activities within the City of San Diego in the baseline year 2010 for five major sectors, including residential buildings, nonresidential buildings and facilities, transportation, water, solid waste, and municipal operations. Emissions were associated with a variety of sources, including direct combustion of fossil fuels, purchased electricity, transportation (gasoline and diesel), solid waste, potable water, and materials. These sources are described in greater detail in Appendix ~~EA~~ of the CAP. The CAP estimates the GHG emissions for the City of San Diego in the baseline year 2010 to be around 13.0 million metric tons of carbon dioxide equivalent (MMT CO₂e), of which the largest contributing sector was transportation (54 percent), followed by electricity use (24 percent), natural gas use (16 percent), and solid waste and wastewater collection, disposal, and treatment (5 percent).

D.3 Regulatory Setting

The following sections summarize federal, state and local regulations regarding energy, GHGs and global climate change. A variety of agencies work jointly as well as individually to understand and regulate the effects of greenhouse gas emissions and resulting climate change through legislation, planning, policy-making, education, and programs.

Federal

Federal Clean Air Act

The federal CAA requires the U.S. EPA to define national ambient air quality standards to protect public health and welfare in the U.S. The CAA does not specifically regulate GHG emissions; however, on April 2, 2007, the U.S. Supreme Court in *Massachusetts v. U.S. Environmental Protection Agency*, determined that GHGs are pollutants that can be regulated under the CAA. Currently, there are no federal regulations that establish ambient air quality standards for GHGs.

On December 7, 2009, U.S. EPA adopted its Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases under the CAA (Endangerment Finding). The Endangerment Finding is based on Section 202(a) of the CAA, which states that the U.S. EPA Administrator should regulate and develop standards for “emission[s] of air pollution from any class or classes of new motor vehicles or new motor vehicle engines, which in [its] judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare.” The rule addresses Section 202(a) in two distinct findings. The first addresses whether the concentrations of the six key GHGs (CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆) in the atmosphere threaten the public health and welfare of current and future generations. The second addresses whether the combined emissions of GHGs from new motor vehicles and motor vehicle engines contribute to atmospheric concentrations of GHGs and, therefore, contribute to the threat of climate change.

The U.S. EPA Administrator determined that atmospheric concentrations of GHGs endanger the public health and welfare within the meaning of Section 202(a) of the CAA. The evidence supporting this finding consists of human activity resulting in “high atmospheric levels” of GHG emissions, which are likely responsible for increases in average temperatures and other climatic changes. Furthermore, the observed and projected results of climate change (e.g., higher likelihood of heat waves, wild fires, droughts, sea level rise, higher intensity storms) are a threat to the public health and welfare. Therefore, GHGs were found to endanger the public health and welfare of current and future generations.

The U.S. EPA Administrator also found that GHG emissions from new motor vehicles and motor vehicle engines are contributing to air pollution, which is endangering public health and welfare. The findings do not in and of themselves impose any emission reduction requirements but, rather, allow USEPA to finalize the GHG standards proposed earlier in 2009 for new light-duty vehicles as part of the joint rulemaking with the Department of Transportation.

Energy Policies and Programs

At the federal level, the U.S. Department of Transportation, U.S. Department of Energy, and USEPA have substantial influence over energy policies and programs. Generally, federal agencies influence transportation energy consumption through establishment and enforcement of fuel economy standards for automobiles and light trucks, through funding of energy-related research and development projects, and through funding for transportation infrastructure projects. In addition, the Federal Energy Regulatory Commission (FERC) is an independent

agency that regulates the interstate transmission of electricity, natural gas, and oil. FERC also reviews proposals to build liquefied natural gas (LNG) terminals and interstate natural gas pipelines as well as licensing hydropower projects. Licensing of hydroelectric facilities under the authority of FERC includes input from State and Federal energy and power generation, environmental protection, fish and wildlife, and water quality agencies. The California Energy Commission's Systems Assessment and Facilities Siting Division coordinates with FERC to ensure that needed energy facilities are authorized in an expeditious, safe, and environmentally acceptable manner.

The National Energy Policy, developed in May 2001, proposes recommendations on energy use and on the repair and expansion of the nation's energy infrastructure. The policy is based on the finding that growth in U.S. energy consumption is outpacing the current rate of production. Based on this policy document, during the years 2000 to 2020, consumption of oil is predicted to increase by 33 percent, natural gas by over 50 percent, and electricity by 45 percent. While federal policy promotes further improvements in energy use through conservation, it focuses on increased development of domestic oil, gas, and coal and the use of hydroelectric and nuclear power resources. To address the over-reliance on natural gas for new electric power plants, the federal policy proposes research in clean coal technology and expanding generation to include energy derived from landfill gas, wind, and biomass sources.

State of California

California Air Resources Board

CARB is the agency responsible for coordination and oversight of state and local air pollution control programs in California.

There are currently no state regulations in California that establish ambient air quality standards for GHGs. However, California has passed laws directing CARB to develop actions to reduce GHG emissions, and several state legislative actions related to climate change and GHG emissions have come into play in the past decade.

California Energy Commission

The California Energy Commission (CEC) is California's primary energy policy and planning agency. Created by the California Legislature in 1974, the CEC has five major responsibilities: 1) forecasting future energy needs and keeping historical energy data; 2) licensing thermal power plants 50 MW or larger; 3) promoting energy efficiency through appliance and building standards; 4) developing energy technologies and supporting renewable energy; and 5) planning for and directing State response to energy emergencies. Under the requirements of the California Public Resources Code, the CEC in conjunction with the California Department of Conservation (DOC) Division of Oil, Gas, and Geothermal Resources is required to assess electricity and natural gas resources on an annual basis or as necessary.

The State of California regulates energy consumption under Title 24 of the California Code of Regulations. The Title 24 Building Energy Efficiency Standards were developed by the CEC and

apply to energy consumed for heating, cooling, ventilation, water heating, and lighting in new residential and non-residential buildings. The CEC updates these standards periodically.

California Public Utilities Commission

The California Public Utilities Commission (CPUC) is a State agency created by a constitutional amendment to regulate privately-owned utilities providing telecommunications, electric, natural gas, water, railroad, rail transit, and passenger transportation services, and in-State moving companies. The CPUC is responsible for assuring that California utility customers have safe, reliable utility services at reasonable rates, while protecting utility customers from fraud. The CPUC regulates the planning and approval for the physical construction of electric generation, transmission, or distribution facilities; and local distribution pipelines of natural gas.

Assembly Bill 1493

In 2002, then-Governor Gray Davis signed AB 1493, which required CARB to develop and adopt, by January 1, 2005, regulations that achieve “the maximum feasible reduction of GHGs emitted by passenger vehicles and light-duty trucks and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the state.”

To meet the requirements of AB 1493, CARB approved amendments to the California Code of Regulations (CCR) in 2004, adding GHG emissions standards to California’s existing standards for motor vehicle emissions. Amendments to Title 13 CCR, Sections 1900 and 1961 (13 CCR 1900, 1961), and adoption of Section 1961.1 (13 CCR 1961.1), require automobile manufacturers to meet fleet-average GHG emissions limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty passenger vehicle weight classes (i.e., any medium-duty vehicle with a gross vehicle weight rating of less than 10,000 pounds and which is designed primarily for the transportation of persons), beginning with model year 2009. For passenger cars and light-duty trucks with a loaded vehicle weight (LVW) of 3,750 pounds or less, the GHG emission limits for model year 2016 are approximately 37 percent lower than the limits for the first year of the regulations, model year 2009. For light-duty trucks with an LVW of 3,751 pounds to a gross vehicle weight of 8,500 pounds, as well as for medium-duty passenger vehicles, GHG emissions will be reduced approximately 24 percent between 2009 and 2016.

Because the Pavley standards (named for the bill’s author, state Senator Fran Pavley) would impose stricter standards than those under the federal CAA, California applied to the U.S. EPA for a waiver under the federal CAA, which was granted in 2009.

Executive Order S-3-05

Executive Order S-03-05, which was signed by Governor Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra’s snowpack, further exacerbate California’s air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the Executive Order established total GHG emission targets. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

The Executive Order directed the Secretary of the California Environmental Protection Agency (CalEPA) to coordinate a multi-agency effort to reduce GHG emissions to the target levels. The Secretary will also submit biannual reports to the governor and state legislature describing progress made toward reaching the emission targets, impacts of global warming on California's resources, and mitigation and adaptation plans to combat these impacts. To comply with the Executive Order, the Secretary of CalEPA created the California Climate Action Team (CCAT) made up of members from various state agencies and commissions. CCAT released its first report in March 2006. The report proposed to achieve the targets by building on voluntary actions of California businesses, local government, and community actions, as well as through state incentive and regulatory programs.

Assembly Bill 32 (California Global Warming Solutions Act of 2006)

In September 2006, Governor Arnold Schwarzenegger signed the California Global Warming Solutions Act (AB 32; California Health and Safety Code Division 25.5, Sections 38500 - 38599). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. This reduction will be accomplished by enforcing a statewide cap on GHG emissions that will be phased in starting in 2012. To effectively implement the cap, AB 32 directs CARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then CARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

AB 32 requires CARB to adopt a quantified cap on GHG emissions representing 1990 emissions levels and disclose how it arrived at the cap; institute a schedule to meet the emissions cap; and develop tracking, reporting, and enforcement mechanisms to ensure that the state reduces GHG emissions enough to meet the cap. AB 32 also includes guidance on instituting emissions reductions in an economically efficient manner, along with conditions to ensure that businesses and consumers are not unfairly affected by the reductions. CARB has discretionary authority to seek greater reductions in the more significant and growing GHG sectors, such as transportation, as compared to other sectors that are not anticipated to significantly increase emissions.

Scoping Plan Provisions

On December 11, 2008, CARB adopted its *Climate Change Scoping Plan*, outlining measures to meet the 2020 GHG reduction goals. In order to meet these goals, California must reduce its GHG emissions by 30 percent below projected 2020 business-as-usual emissions levels or about 15 percent from today's levels. According to the 2008 Scoping Plan, the 2020 target of MMT CO₂e required the reduction of 169 MMT CO₂e, or approximately 28.4 percent, from the state's projected 2020 business-as-usual (BAU) emissions level of 596 MMT CO₂e. In August 2011, the Scoping Plan was re-approved by the Board and includes the Final Supplement to the Scoping Plan Functional Equivalent Document. This document includes expanded analysis of project alternatives as well as updates the 2020 emission projections in light of the current economic forecasts.

Considering the updated 2020 BAU estimate of 507 MMT CO₂e, a 16 percent reduction below the estimated BAU levels would be necessary to return to 1990 levels by 2020. The document also excludes one measure identified in the 2008 Scoping Plan that has been adopted and one measure that is no longer under consideration by CARB (CARB, 2011).

The *Climate Change Scoping Plan Update* (CARB, 2014b) details progress towards meeting the 2020 reduction goal since the adoption of AB 32, as well as the GHG reduction framework to meet the 80 percent below 1990 levels by 2050. The primary focus areas identified in the *Climate Change Scoping Plan Update* to meet the long-term reduction goal are associated with energy, transportation, agriculture, water, waste management, natural and working lands, short-lived climate pollutants, green buildings, and cap-and-trade.

Cap-and-Trade Program

The Scoping Plan identified cap-and-trade as a key strategy for helping California reduce its GHG emissions (CARB, 2008). A cap-and-trade program sets the total amount of GHG emissions allowable for facilities under the cap and allows covered sources, including producers and consumers of energy, to determine the least expensive strategies to comply. AB 32 required CARB to adopt the cap-and-trade regulation by January 1, 2011, and the program itself began in November 2012.

Carbon offset credits are created through the development of projects, such as renewable energy generation or carbon sequestration projects, that achieve the reduction of emissions from activities not otherwise regulated, covered under an emissions cap, or resulting from government incentives. Offsets are verified reductions of emissions whose ownership can be transferred to others. As required by AB 32, any reduction of GHG emissions used for compliance purposes must be real, permanent, quantifiable, verifiable, enforceable, and additional. In January 2014, California connected its cap-and-trade program with that of Quebec, which increased the options for emission reductions and represents a step forward in California's efforts to collaborate with global partners to reduce GHGs (CARB, 2014b).

Executive Order S-1-07

Executive Order S-1-07, which was signed by Governor Schwarzenegger in 2007, proclaims that the transportation sector is the main source of GHG emissions in California, generating more than 40 percent of statewide emissions. It establishes a goal to reduce the carbon intensity of transportation fuels sold in California by at least ten percent by 2020. This order also directs CARB to determine whether this Low Carbon Fuel Standard (LCFS) could be adopted as a discrete early-action measure as part of the effort to meet the mandates in AB 32.

On April 23, 2009, CARB approved the proposed regulation to implement the LCFS. The LCFS will reduce GHG emissions from the transportation sector in California by about 16 million MMT in 2020. The LCFS is designed to reduce California's dependence on petroleum, create a lasting market for clean transportation technology, and stimulate the production and use of alternative, low-carbon fuels in California. The LCFS is designed to provide a durable framework that uses market mechanisms to spur the steady introduction of lower carbon fuels. The framework

establishes performance standards that fuel producers and importers must meet each year beginning in 2011. One standard is established for gasoline and the alternative fuels that can replace it. A second similar standard is set for diesel fuel and its replacements.

Senate Bill 97

SB 97, signed August 2007 (Chapter 185, Statutes of 2007; PRC Sections 21083.05 and 21097), acknowledges that climate change is a prominent environmental issue that requires analysis under CEQA. The bill directs the California Office of Planning and Research (OPR) to prepare, develop, and transmit to the California Natural Resources Agency, guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA, by July 1, 2009. The Natural Resources Agency was required to certify or adopt those guidelines by January 1, 2010. On April 13, 2009, OPR submitted to the Secretary for Natural Resources its proposed amendments to the *CEQA Guidelines* for GHG emissions, as required by SB 97. On February 16, 2010, the Office of Administrative Law (OAL) approved the amendments, and filed them with the Secretary of State for inclusion in the California Code of Regulations. The amendments became effective on March 18, 2010.

Senate Bills 1078 and 107 and Executive Orders S-14-08 and S-21-09

SB 1078 (Chapter 516, Statutes of 2002) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010.

In November 2008, then-Governor Schwarzenegger signed Executive Order S-14-08, which expands the state's Renewable Portfolio Standard to 33 percent renewable power by 2020. In September 2009, then-Governor Schwarzenegger continued California's commitment to the Renewable Portfolio Standard by signing Executive Order S-21-09, which directs CARB under its AB 32 authority to enact regulations to help the state meet its Renewable Portfolio Standard goal of 33 percent renewable energy by 2020.

The 33-percent-by-2020 goal was codified in April 2011 with Senate Bill X1-2, which was signed by Governor Edmund G. Brown, Jr. This new Renewable Portfolio Standard preempts CARB 33 percent Renewable Electricity Standard and applies to all electricity retailers in the state, including publicly owned utilities (POUs), investor-owned utilities, electricity service providers, and community choice aggregators. All of these entities must adopt the new Renewable Portfolio Standard goals of 20 percent of retail sales from renewables by the end of 2013 and 25 percent by the end of 2016, with the 33 percent requirement being met by the end of 2020.

Senate Bill 375

SB 375, signed in September 2008 (Chapter 728, Statutes of 2008), aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a sustainable communities strategy (SCS) or alternative planning strategy (APS) that will prescribe land use allocation in

that MPO's regional transportation plan (RTP). CARB, in consultation with MPOs, has provided each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every eight years but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. CARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned targets. If MPOs do not meet the GHG reduction targets, transportation projects may not be eligible for funding programmed after January 1, 2012.

This law also extends the minimum time period for the regional housing needs allocation cycle from five years to eight years for local governments located within an MPO that meet certain requirements. City or county land use policies (including general plans) are not required to be consistent with the regional transportation plan (and associated SCS or APS). However, new provisions of CEQA would incentivize (through streamlining and other provisions) qualified projects that are consistent with an approved SCS or APS, categorized as "transit priority projects."

OPR's 2008 Technical Advisory

On June 19, 2008, OPR published a technical advisory on CEQA and Climate Change. The advisory provided OPR's perspective on the emerging role of CEQA in addressing climate change and GHG emissions, while recognizing that approaches and methodologies for calculating GHG emissions and addressing environmental impacts through CEQA review are rapidly evolving. The advisory recognized that OPR would develop amendments to the State CEQA Guidelines pursuant to SB 97 as was done in 2010. The Natural Resources Agency would then adopt these amendments. The technical advisory pointed out that neither CEQA nor the CEQA Guidelines prescribe quantitative thresholds of significance or particular methodologies for performing an impact analysis by stating, "This is left to lead agency judgment and discretion, based upon factual data and guidance from regulatory agencies and other sources where available and applicable" (OPR, 2008). This deference to lead agencies was memorialized in the CEQA Guidelines Section 15064.4 as discussed below. OPR recommended, at the time, that "the global nature of climate change warrants investigation of a statewide threshold of significance for GHG emissions" (OPR, 2008).

Until such a standard is established, OPR advises that each lead agency should develop its own approach to performing analyses for projects that generate greenhouse gas emissions (OPR, 2008). Agencies should then assess whether the emissions are "cumulatively considerable" even though a project's GHG emissions may be individually limited. OPR states, "Although climate change is ultimately a cumulative impact, not every individual project that emits GHGs must necessarily be found to contribute to a significant cumulative impact on the environment" (OPR, 2008). Based on this, individual lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice (OPR, 2008).

If the lead agency determines emissions are a cumulatively considerable contribution to a significant cumulative impact, then the lead agency must investigate and implement ways to mitigate the emissions (OPR, 2008). OPR states that "Mitigation measures will vary with the type

of project being contemplated, but may include alternative project designs or locations that conserve energy and water, measures that reduce vehicle miles traveled (VMT) by fossil-fueled vehicles, measures that contribute to established regional or programmatic mitigation strategies, and measures that sequester carbon to offset the emissions from the project” (OPR, 2008). OPR concludes that “a lead agency is not responsible for wholly eliminating all GHG emissions from a project; the CEQA standard is to mitigate to a level that is “less than significant” (OPR, 2008). The technical advisory includes a list of mitigation measures that can be applied on a project-by-project basis.

CEQA Guidelines Revisions

In 2007, the State Legislature passed SB 97, which required amendment of the State CEQA Guidelines to incorporate analysis of, and mitigation for, GHG emissions from projects subject to CEQA. The California Natural Resources Agency adopted these amendments on December 30, 2009, and they took effect on March 18, 2010, after review by the Office of Administrative Law and filing with the Secretary of State for inclusion in the California Code of Regulations.

The Guidelines revisions include a new section (Sec. 15064.4) that specifically addresses the potential significance of GHG emissions. Section 15064.4 calls for a “good-faith effort” to “describe, calculate or estimate” GHG emissions; Section 15064.4 further states that the analysis of the significance of any GHG impacts should include consideration of the extent to which the project would increase or reduce GHG emissions; exceed a locally applicable threshold of significance; and comply with “regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions.” The new Guidelines also state that a project may be found to have a less-than-significant impact on GHG emissions if it complies with an adopted plan that includes specific measures to sufficiently reduce GHG emissions (Sec. 15064(h)(3)). Importantly, however, the Guidelines do not require or recommend a specific analytical methodology or provide quantitative criteria for determining the significance of GHG emissions.

No quantitative significance threshold is included in the Amendments. The *CEQA Guidelines* afford the customary deference provided to lead agencies in their analysis and methodologies. OPR emphasizes the necessity of having a consistent threshold available to analyze projects, and the analyses should be performed based on the best available information. For example, if a lead agency determines that GHGs may be generated by a proposed project, the agency is responsible for assessing GHG emissions by type and source. The CEQA Guidelines Amendments provide the following recommendations for determining the significance of GHG emissions under Section 15064.4:

- (a) The determination of the significance of GHG emissions calls for a careful judgment by the lead agency consistent with the provisions in Section 15064. A lead agency should make a good-faith effort, based on available information, to describe, calculate or estimate the amount of GHG emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:

- (1) Use a model or methodology to quantify GHG emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; and/or
 - (2) Rely on a qualitative analysis or performance based standards.
- (b) A lead agency may consider the following when assessing the significance of impacts from GHG emissions on the environment:
- (1) The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting;
 - (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and
 - (3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of GHG emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

The Amendments also include a new Subdivision 15064.7(c) which clarifies that in developing thresholds of significance, a lead agency may appropriately review thresholds developed by other public agencies, or recommended by other experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence.

In addition, the Amendments include a new Section 15183.5 that provides for tiering and streamlining the analysis of GHG emissions. Project-specific environmental documents may rely on an EIR containing a programmatic analysis of GHG emissions in the region over a specified time period.

Finally, the Amendments add a new set of environmental checklist questions (VII. Greenhouse Gas Emissions) to the CEQA Guidelines Appendix G, which are provided below under Thresholds of Significance.

California Green Buildings Standard Code

In January 2010, the State of California adopted the 2010 California Green Building Standards (CALGreen) Code, which became effective in January 2011. Building off of the initial 2008 California Green Building Code, the 2010 CALGreen Code represents a more stringent building code that requires, at a minimum, that new buildings and renovations in California meet certain sustainability and ecological standards. The 2010 CALGreen Code has mandatory Green Building provisions for all new residential buildings that are three stories or fewer (including hotels and motels) and all new non-residential buildings of any size that are not additions to existing buildings. As of January 2011, California requires that new buildings reduce water

consumption, employ building commissioning to increase building system efficiencies, divert construction waste from landfills, and install low pollutant emitting finish materials. CALGreen's mandatory measures establish a minimum for green construction practices, and incorporate environmentally responsible buildings into California cities. CALGreen allows jurisdictions to adopt stricter requirements than the mandatory minimum requirements in CALGreen.

In early 2013, the California Building Standards Commission adopted the 2013 California Building Standards Code that also included the latest 2013 CALGreen Code, which became effective on January 1, 2014. The mandatory provisions of the code are anticipated to reduce three MMT of GHG emissions by 2020, reduce water use by 20 percent or more, and divert 50 percent of construction waste from landfills. The 2013 California Energy Code (Title 24, Part 6), which is also part of the CALGreen Code (Title 24, Part 11, Chapter 5.2), became effective on July 1, 2014.

Executive Order B-30-15

On April 29, 2015, Governor Brown issued an executive order to establish a California greenhouse gas reduction target of 40 percent below 1990 levels by 2030. The executive order does all of the following:

- Establishes a new interim statewide greenhouse gas emission reduction target to reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030 in order to ensure California meets its target of reducing greenhouse gas emissions to 80 percent below 1990 levels by 2050;
- Directs all state agencies with jurisdiction over sources of greenhouse gas emissions to implement measures to achieve reductions of greenhouse gas emissions to meet the 2030 and 2050 greenhouse gas emissions reductions targets;
- Directs CARB to update the *Climate Change Scoping Plan* to express the 2030 target in terms of million metric tons of carbon dioxide equivalent;
- Directs the California Natural Resources Agency to update every three years the state's climate adaptation strategy, *Safeguarding California*, and ensure that its provisions are fully implemented;
- Directs all State agencies to take climate change into account in their planning and investment decisions, and to employ full life-cycle cost accounting to evaluate and compare infrastructure investments and alternatives;
- Directs State agencies' planning and investment to give priority to actions that both build climate preparedness and reduce greenhouse gas emissions; take flexible and adaptive approaches to prepare for uncertain climate impacts; protect the state's most vulnerable populations; and prioritize natural infrastructure solutions;
- Requires the state's Five-Year Infrastructure Plan to take current and future climate change impacts into account in all infrastructure projects;
- Directs the Governor's Office of Planning and Research to establish a technical advisory group to help state agencies incorporate climate change impacts into planning and investment decisions; and

- Directs the state to continue its climate change research program focused on understanding the impacts of climate change and how best to prepare and adapt to such impacts.

City of San Diego Draft Screening Criteria for Greenhouse Gas Emissions

As a companion document to the CAP, the City has prepared screening criteria for GHG emissions. The purpose of the screening criteria is to provide guidance to City staff conducting CEQA review to ensure a consistent and objective evaluation of the potential for significant effects from proposed projects that will result in the emission of GHGs. This “bright line” numeric screening criterion for annual operational emissions will be used to assess whether a project conflicts with existing California legislation adopted to reduce statewide anthropogenic GHG emissions, based on substantial evidence demonstrating that a defined level of project emissions would make a considerable contribution to the cumulative impact on GHG emissions. A screening criterion would be used to determine if modeled emissions would have a less than significant cumulative impact. Emissions above the screening criterion would need to complete the CAP Consistency Checklist to determine if the impact is significant. The City’s Draft Greenhouse Gas Emission Screening Criteria includes a table of development types that would fall below this numeric screening criterion (City of San Diego, 2015b).

D.4 Impacts and Mitigation Measures

Significance Criteria

Based on Appendix G of the CEQA Guidelines, impacts related to GHG emissions may be considered significant if the proposed project would:

- Generate GHG emissions, either directly or indirectly, that may have a cumulatively significant impact on the environment; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs (e.g., CARB’s AB 32 Scoping Plan).

Impact Analysis

As indicated in Table 2-5 in Chapter 2, Project Description, several of the CAP strategies, actions, and supporting measures could result in GHG emissions that would contribute to the cumulative effect of GHGs on climate; or they could conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs. These actions include:

- **Action 1.5 Outdoor Landscaping Ordinance.** Supporting measures and steps that support implementation of this action could result in the construction of new or expansion of existing water recycling facilities and infrastructure, including potential modifications to wastewater treatment plants, installation of recycled water delivery systems, monitoring systems, etc. which could result in temporary increased GHG emissions.
- **Action 2.1 Community Choice Aggregation Program or Similar Program.** Supporting measures and steps that support implementation of this action could result in installation of

small scale and large scale renewable energy generation, transmission, and storage systems that could result in increased GHG emissions.

- **Action 2.2 Municipal Zero Emissions Vehicles.** These actions could result in construction activities associated with development of electrical charging and other fueling infrastructure which could result in increased GHG emissions.
- **Action 2.3 Convert Municipal Waste Collection Trucks to Low Emission Fuel.** These actions could result in construction activities associated with development of fueling infrastructure which could result in increased GHG emissions.
- **Action 3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas.** These actions would facilitate the implementation of the City of Villages strategy and the shift to greater emphasis on mass transit and other modes of transportation. These actions could, therefore, result in new construction and other physical changes that could result in increased GHG emissions.
- **Action 3.2 Implement the City's Pedestrian Master Plan in Transit Priority Areas.** These actions would result in renovations and retrofits of existing sidewalks, cross-walks, and pedestrian trails as well of construction of new pedestrian facilities that may result in short-term construction related impacts, and changes to circulation that could result in increased GHG emissions.
- **Action 3.3 Implement the City's Bicycle Master Plan.** These actions would result in renovations and retrofits of existing bike lanes and construction of new bike lanes and facilities that may result in short-term construction impacts and long-term effects on traffic and circulation that could result in increased GHG emission.
- **Action 3.5 Implement a Roundabouts Master Plan.** These actions would lead to short-term construction impacts and operational changes to traffic circulation that could result in increased GHG emission
- **Action 3.6 Implement Transit-Oriented Development within Transit Priority Areas.** These actions would result in new development at a higher density than existing development, especially near transit corridors. Short-term construction impacts and long-term changes to traffic and circulation could result in increased GHG emissions.
- **Action 4.1 Divert Solid Waste and Capture Landfill Emissions.** This action could lead to the implementation of landfill gas collection operational procedures in compliance with the California Air Resources Board's Landfill Methane Capture regulations, as well as new or expanded programs to divert solid waste from landfill disposal. Some of these programs could result in increased GHG emissions.
- **Action 4.2 Capture Methane from Wastewater Treatment.** Associated actions could result in new or expanded wastewater treatment facilities, such as anaerobic digesters, that could increase increased GHG emissions.

While many of the proposed CAP actions would result in long-term reductions in GHG emissions, several involve construction of new or remodeled buildings and facilities that could result in short-term construction-related GHG. Several others may lead to construction of new facilities or programs that may have the potential to produce operational GHG emissions. These potential impacts are examined in detail below.

Issue 1: Would implementation of the CAP generate GHG emissions, either directly or indirectly, that may have a cumulatively significant impact on the environment?

As shown in Table 2-1 in the Project Description, the CAP estimates that the City's baseline GHG emissions in the year 2010 at around 13.0 MMT CO₂e. Of this, the largest contributing sector was transportation (~~54~~ 55 percent), followed by electricity use (24 percent), natural gas use (16 percent), and solid waste and wastewater collection, disposal, and treatment (5 percent). The CAP estimates that the City's unmitigated (i.e., "business as usual") emissions would reach 14.1 MMT CO₂e by 2020 and around 16.74 MMT CO₂e by 2035.

Implementation of the CAP would reduce per capita GHG emissions. Implementation of the CAP would also result in an overall decrease in GHG emissions citywide.

Strategies in the CAP rely on implementation of State legislation as well as local policies for emissions reductions. State actions designed to reduce emissions from energy use include: California's Renewable Portfolio Standard (RPS), which establishes the goal to procure 33 percent of electricity sales from renewable sources by 2020 and 50 percent by 2035, utility energy efficiency programs directed by the California Public Utilities Commission, Assembly Bill 1103 which established the Commercial Energy Use Disclosure Requirement, and Solar Programs offered by the State. State actions that reduce emissions from transportation include: California's Pavley I/CAFÉ standards, the Low Carbon Fuel Standard, electric vehicle policies and programs, and CARB's Tire Pressure Program and Heavy Duty Vehicle Aerodynamics Program. The CAP also includes reductions from improved transportation and land use planning that result from SANDAG's Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS), as required by SB 375.

Implementation of the strategies in the CAP would result in an estimated reduction of ~~422,633~~ 423,116 MT CO₂e by 2020, ~~2.4~~ 1.3 MMT CO₂e by 2030, and ~~3.5~~ 2.5 MMT CO₂e by 2035. This, along with the above described state and federal actions, would decrease the BAU emissions from 14.1 MMT CO₂e to around 9.8 MMT CO₂e in 2020, from 15.87 MMT CO₂e to around 7.6 MMT CO₂e in 2030, and from 16.74 MMT CO₂e to 6.34 MMT CO₂e in 2035. The City would implement a monitoring plan to ensure the strategies in the CAP achieve the anticipated GHG reductions.

Implementation of several of the proposed CAP actions which entail new or remodeled construction could result in short-term construction-related GHG emissions. Several proposed CAP actions have this potential, but do not have the potential for increased GHG emissions associated with operation of the program authorized by the CAP Action. Several other proposed CAP actions and supporting measures under Strategy 1, Energy and Water Efficient Buildings, involve minor construction activities, such as energy and water efficiency upgrades to existing buildings that are not expected to result in substantial construction-related GHG emissions. The proposed CAP actions that are likely to result in construction-related GHG emissions include: Actions 2.1, 2.2, 2.3, 3.2, 3.3 and 3.5. These actions would result in relatively small-scale, localized, and short-duration construction activities.

Construction activities typically emit GHGs from combustion of fossil fuels in diesel and gasoline-powered equipment and vehicles, and from use of electricity that is generated partially from sources that emit GHGs. Because these proposed CAP actions would be limited in extent and duration, they would emit relatively small amounts of GHGs. Furthermore, each of these proposed actions is expected to result in long-term, substantial reductions in GHG emissions, by reducing water use, facilitating use of non-polluting modes of transportation, facilitating traffic flow, and converting municipal vehicles to low emission or zero emission models. Therefore, these proposed CAP actions are expected to reduce GHG emissions overall, and therefore not to make a considerable contribution to the cumulative effect of GHG emissions on climate change.

Implementation of several proposed CAP actions could result in both construction-related and operations-related GHG emissions. These include Actions 1.5, 2.1, 3.1, 3.6, 4.1 and 4.2. Several of these actions, if implemented, could result in relatively large construction projects, such as development of large-scale renewable energy facilities under Action 2.1; in-fill development and redevelopment within Transit Priority Areas, facilitated by Actions 3.1 and 3.6; and new or expanded wastewater and solid waste processing facilities under Actions 4.1 and 4.2. However, as indicated in the discussion of expected GHG emissions reduction from implementation of the CAP, these actions would also result in substantial long-term reductions in GHG emissions. Therefore, they would not be considered to have the potential to make a considerable contribution to cumulative GHG emissions.

Proposed CAP Action 4.1 Divert Solid Waste and Capture Landfill Emissions, may result in specific measures that change solid waste collection and handling in the City. Supporting measures for this action include a change to weekly collection of recycling and greenwaste and addition of food scraps to the greenwaste collection program. These would result in the increase in the number of weekly collections serving each household or business, and a substantial increase in VMT by collection vehicles, and therefore the potential for increased GHG emissions. Proposed CAP Action 2.3 Conversion of Waste Collection Vehicles to Alternative Fuel would reduce GHG emission rates for collection vehicles, and would offset the increase in collection vehicle VMT. However, the conversion would not be complete until 2035. Furthermore, this action only addresses collection vehicles. Proposed CAP Action 4.1 may also result in the use of new or different waste processing facilities, such as composting facilities, anaerobic digesters, and material recovery facilities. While these facilities would result in reduction of GHG emissions from waste processing relative to landfilling of the same materials, in some instances the haul distance to these facilities from local transfer stations may be longer than the current haul distance. This could result in increased VMT by diesel-powered long-haul trucks and a substantial increase in GHG emissions.

Significance of Impact

As described above, construction and operations associated with implementation of most of the proposed CAP actions may result in GHG emissions, but these emissions would be more than offset by the long-term reductions in GHG emissions that the actions would enable. Therefore, GHG emissions associated with implementation of these actions would not make a considerable contribution to cumulative GHG emissions, and the impact would be less than significant.

Action 4.1 Divert Solid Waste and Capture Landfill Emissions could result in increased GHG emissions from increased VMT by solid waste collection and long-haul vehicles. Action 4.1 would result in 75 percent waste diversion by 2020 and 90 percent waste diversion by 2035. Using the calculation method described in CAP Appendix ~~BA~~¹, this action would result in a reduction of 154,467 MMT CO₂e by 2020, ~~283,309 MMT CO₂e by 2030~~, and 344,213 MMT CO₂e by 2035. Meanwhile, CAP Action 2.3 would convert the City's waste collection trucks to low emission fuels, which helps offset the potential increase in GHG emissions from the increased VMT by waste collection and long-haul vehicles. For example, if the City was to increase their recycling collection services from once every other week to every week to achieve 90% diversion (a reasonable assumption), then the collection fleet would consume approximately 1.3 million gallons of fuel per year compared to 1 million gallons of fuel per year under the existing waste collection scenario¹. Without implementation of Action 2.3, this increased fuel use would consist entirely of diesel fuel and the resulting increase in GHG emissions would be 3,383 MT CO₂e per year over existing conditions for a total of 13,534 MT CO₂e annually. However, with the conversion of the entire collection fleet to low emission fuels, the GHG emissions increase due to enhanced collection services would be limited to approximately 9.6 MT of CO₂e annually, which offsets more than 99.7% of the emissions that would result from using diesel fuel.²

In conclusion, adoption and implementation of the CAP would result in a net decrease in GHG emissions, both compared to the 2010 baseline and to the BAU projections for 2020, 2030, and 2035. The CAP therefore would not generate GHG emissions that would have a cumulatively significant impact on the environment and the impact would be less than significant.

Mitigation Framework

No mitigation is required.

Issue 2: Would implementation of the CAP conflict with the GHG reduction targets and measures identified in Governor's Executive Order S-3-05, Executive Order B-30-15, and CARB's AB 32 Scoping Plan?

The CAP is designed to be consistent with the reduction measures and recommendations contained in CARB's AB 32 Scoping Plan. The Pavley Program, Renewable Portfolio Standard, Low Carbon Fuel Standard, SB 375 land use and transportation strategies, energy efficiency measures, solar PV measures, vehicle and fuel efficiency measures, landfill methane capture, and urban forestry practices are all measures in the CARB Scoping Plan that are also included in the CAP.

Following direction provided in the CARB Scoping Plan, as set forth in the CAP, BAU emissions would reach 14.1 MMT CO₂e by 2020, 15.87 MMT CO₂e by 2030, and 16.74 MMT CO₂e by 2035. One of the project objectives for the CAP is to conform to California laws and regulations.

¹ See methodology description in CAP Appendix ~~BA~~, page ~~B-28 to B-29~~ ~~A-39 to A-40~~.

² This scenario is intended to illustrate to what extent switching to low-carbon fuels for the solid waste collection fleet may offset an increase in VMT to achieve enhanced waste diversion while also reducing total GHG emissions. The actual increase in VMT and GHG emissions associated with CAP Action 4.1 would be dependent on the combination of waste diversion strategies in the Zero Waste Plan that the City chooses to implement to achieve its 2020 and 2035 goals.

Consistent with AB 32, the CAP sets a GHG target for 2020 equivalent to ~~25~~ 15 percent below the City's 2010 baseline emissions, which is equivalent to ~~11.04~~ MMT CO₂e. The CAP sets a 2030 target equivalent to 41 percent below the 2010 baseline to comply with Executive Order B-30-15. The CAP sets a 2035 target equivalent to ~~51~~ 10 percent below the 2010 baseline, as an interim target in line with the 2050 target established by Executive Order S-3-05, which call for an 80 percent reduction below 1990 levels. Accordingly, the City's 2035 target is approximately 6.5 MMT CO₂e. As shown in **Table 3.D-1**, implementation of the CAP is anticipated to enable the City to exceed its reduction target by ~~1.23~~ MMT CO₂e in 2020, ~~176,528~~ 211,196 MT CO₂e in 2030, and ~~127,136~~ 205,462 MT CO₂e in 2035.

As outlined in the Project Description, the City would implement a monitoring plan to ensure that the strategies in the CAP achieve the anticipated GHG reductions.

**TABLE 3.D-1
ESTIMATED GHG REDUCTION POTENTIAL OF CAP STRATEGIES**

Reductions from	2020 MT CO ₂ e	2030	2035 MT CO ₂ e
2010 Baseline Emissions	13,010,591 <u>12,984,993</u>	13,010,591 <u>12,984,993</u>	13,010,591 <u>12,984,993</u>
Total Projected Emissions (Business-as-Usual)	14,067,316 <u>14,124,690</u>	15,667,449 <u>15,856,604</u>	16,427,118 <u>16,716,020</u>
Estimated GHG Reductions from CAP	(4,275,421) <u>(4,330,946)</u>	(8,032,274) <u>(8,276,804)</u>	(10,044,459) <u>(10,428,986)</u>
GHG Emissions with Implementation of the CAP	9,791,894 <u>9,793,744</u>	7,635,226 <u>7,579,800</u>	6,382,659 <u>6,287,035</u>
City Target Emissions Levels ¹	11,066,652 <u>11,037,244</u>	7,811,754 <u>7,790,996</u>	6,509,795 <u>6,492,497</u>
<i>Additional Reduction Below Target</i>	(1,274,758) <u>(1,243,500)</u>	(176,528) <u>(211,196)</u>	(127,136) <u>(205,462)</u>

¹ To achieve its proportional share of the state reduction targets for 2020 (AB32), 2030 (EO B-30-15) and 2050 (EO S-3-05), the City would need to reduce emissions below the 2010 baseline by 15 percent in 2020, 40 percent in 2030, and 50 percent by 2035. To meet these goals, the City must implement strategies that reduce emissions to approximately 11 MMT of CO₂e in 2020, 7.8 MMT CO₂e in 2030, and 6.5 MMT of CO₂e in 2035. Implementation of the CAP would accomplish this.

SOURCE: San Diego CAP, 2015

Significance of Impact

As described above, the CAP would not conflict with the GHG reduction targets established by Executive Order S-3-05, Executive Order B-30-15, and AB 32, or the reduction measures identified in CARB's AB 32 Scoping Plan ~~32~~; rather, the CAP is consistent with and would implement locally several of the GHG reduction measures contained in the CARB Scoping Plan. In addition, implementation of the CAP would result in the City attaining its share of GHG emissions reductions toward the achievement of the statewide GHG emissions reductions targets. This impact would therefore be less than significant.

Mitigation Framework

No mitigation is required.

E. Historical Resources

E.1 Introduction

This section analyzes potential impacts on historical resources that could result from implementation of the City of San Diego (City) Climate Action Plan (CAP).

E.2 Environmental Setting

Historic Overview

Hispanic Era

San Diego history can be divided into the Spanish Period (1769-1821), Mexican Period (1821-1846) and American Period (1846-Present). In spite of Juan Cabrillo's earlier landfall on Point Loma in 1542, the Spanish colonization of Alta California did not begin until 1769 with the founding of Mission San Diego de Alcalá by Father Junípero Serra. Concerns over Russian and English interests in California motivated the Spanish government to send an expedition of soldiers, settlers and missionaries to occupy and secure the northwestern borderlands of New Spain through the establishment of a Presidio, Mission, and Pueblo. The Spanish explorers first camped on the shore of the bay in the area that is now downtown San Diego. Lack of water at this location, however, led to moving the camp on May 14, 1769 to a small hill closer to the San Diego River and near the Kumeyaay village of Cosoy. Father Junípero Serra arrived in July of the same year to find the Presidio serving mostly as a hospital. The Spanish built a primitive mission and presidio structure on the hill near the river.

Bad feelings soon developed between the native Kumeyaay and the soldiers, resulting in construction of a stockade which, by 1772, included barracks for the soldiers, a storehouse for supplies, a house for the missionaries and the chapel, which had been improved. The log and brush huts were gradually replaced with buildings made of adobe bricks. Flat earthen roofs were eventually replaced by pitched roofs with rounded roof tiles. Clay floors were eventually lined with fired brick.

In August, 1774 the Spanish missionaries moved the Mission San Diego de Alcalá to its present location six miles up the San Diego River valley (modern Mission Valley) near the Kumeyaay village of Nipaguay. Begun as a thatched chapel and compound built of willow poles, logs and tules, the new Mission was sacked and burned in the Kumeyaay uprising of November 5, 1775. The first adobe chapel was completed in October 1776 and the present church was begun the following year. A succession of building programs through 1813 resulted in the final rectilinear plan that included the church, bell tower, sacristy, courtyard, residential complex, workshops, corrals, gardens and cemetery. Orchards, reservoirs and other agricultural installations were built to the south on the lower San Diego River alluvial terrace and were irrigated by a dam and aqueduct system. The initial Spanish occupation and mission system brought about profound changes in the lives of the Kumeyaay people. Substantial numbers of the coastal Kumeyaay were forcibly brought into the mission or died from introduced diseases.

As early as 1791, presidio commandants in California were given the authority to grant small house lots and garden plots to soldiers and their families and sometime after 1800, soldiers and their families began to move down the hill near the San Diego River. Historian William Smythe noted that Don Blas Aguilar, who was born in 1811, remembered at least 15 such grants below Presidio Hill by 1821, of which only five of these grant lands within the boundaries of what would become Old Town had houses in 1821. These included the retired commandant Francisco Ruiz adobe (now known as the Carrillo Adobe), another building later owned by Henry Fitch on Calhoun Street, the Ybanes and Serrano houses on Juan Street near Washington Street, and a small adobe house on the main plaza owned by Juan Jose Maria Marron.

Mexican Era

In 1822 the political situation changed as Mexico won its independence from Spain and San Diego became part of the Mexican Republic. The Mexican Government opened California to foreign trade; began issuing private land grants in the early 1820s, creating the rancho system of large agricultural estates; secularized the Spanish missions in 1833; and oversaw the rise of the civilian pueblo. By 1827, as many as 30 homes existed around the central plaza and in 1835, Mexico granted San Diego official pueblo (town) status. At this time the town had a population of nearly 500 residents, later reaching a peak of roughly 600. By 1835 the presidio, once the center of life in Spanish San Diego, had been abandoned and lay in ruins. Mission San Diego de Alcalá fared little better. The town and the ship landing area at La Playa were now the centers of activity in Mexican San Diego. However, the new Pueblo of San Diego did not prosper as did some other California towns during the Mexican Period.

The secularization in San Diego County triggered increased Native American hostilities against the Californios during the late 1830s. The attacks on outlying ranchos, along with unstable political and economic factors helped San Diego's population decline to around 150 permanent residents by 1840. San Diego's official Pueblo status was removed by 1838 and it was made a subprefecture of the Los Angeles Pueblo. When the Americans took over after 1846, the situation had stabilized somewhat, and the population had increased to roughly 350 non-Native American residents. The Native American population continued to decline, as Mexican occupation brought about continued displacement and acculturation of Native American populations.

The American Period began in 1846 when United States military forces occupied San Diego and this period continues today. When United States military forces occupied San Diego in July 1846, the town's residents split on their course of action. Many of the town's leaders sided with the Americans, while other prominent families opposed the United States invasion. In December 1846, a group of Californios under Andres Pico engaged United States Army forces under General Stephen Kearney at the Battle of San Pasqual and inflicted many casualties. However, the Californio resistance was defeated in two small battles near Los Angeles and effectively ended by January 1847. The Americans assumed formal control with the Treaty of Guadalupe-Hidalgo in 1848 and introduced Anglo culture and society, American political institutions and especially American entrepreneurial commerce. In 1850, the Americanization of San Diego began to develop rapidly.

On February 18, 1850, the California State Legislature formally organized San Diego County. The first elections were held at San Diego and La Playa on April 1, 1850 for county officers. San Diego grew slowly during the next decade. San Diegans attempted to develop the town's interests through a transcontinental railroad plan and the development of a new town closer to the bay. The failure of these plans, added to a severe drought which crippled ranching and the onset of the Civil War, left San Diego as a remote frontier town. The troubles led to an actual drop in the town's population from 650 in 1850 to 539 in 1860. Not until land speculator and developer Alonzo Horton arrived in 1867 did San Diego begin to develop fully into an active American town.

American Era

Alonzo Horton's development of a New San Diego (modern downtown) in 1867 began to swing the community focus away from Old Town and began the urbanization of San Diego. Expansion of trade brought an increase in the availability of building materials. Wood buildings gradually replaced adobe structures. Some of the earliest buildings to be erected in the American Period were "Pre-fab" houses which were built on the east coast of the United States and shipped in sections around Cape Horn and reassembled in San Diego. Development spread from downtown based on a variety of factors, including the availability of potable water and transportation corridors. Factors such as views and access to public facilities affected land values, which in turn affected the character of neighborhoods that developed. During the Victorian Era of the late 1800s and early 1900s, the areas of Golden Hill, Uptown, Banker's Hill and Sherman Heights were developed. Examples of the Victorian Era architectural styles remain in these communities, as well as in Little Italy which developed at the same time. At the time downtown was being built, there began to be summer cottage/retreat development in what are now the Beach communities and La Jolla area. The early structures in these areas were not of substantial construction; they were primarily for temporary vacation housing.

Development also spread to the Greater North Park and Mission Hills areas during the early 1900s. The neighborhoods were built as small lots, a single lot at a time; there was not large tract housing development of those neighborhoods. It provided affordable housing away from the downtown area, and development expanded as transportation improved. Barrio Logan began as a residential area, but because of proximity to rail freight and shipping freight docks, the area became more mixed with conversion to industrial uses. This area was more suitable to industrial uses because land values were not as high; topographically the area is more level, and it is not as interesting in terms of views as are the areas north of downtown. Various ethnic groups settled in the area because of the availability of land ownership.

San Ysidro began to be developed at about the turn of the 20th century. The early settlers were followers of the Littlelanders movement. There, the pattern of development was designed to accommodate small plots of land for each homeowner to farm as part of a farming-residential cooperative community. Nearby Otay Mesa-Nestor began to be developed by farmers of Germanic and Swiss background. Some of the prime citrus groves in California were in the Otay Mesa-Nestor area; in addition, there were grape growers of Italian heritage who settled in the Otay River Valley and tributary canyons and produced wine for commercial purposes.

San Diego State University was established in the 1920s; development of the state college area began then and the development of the Navajo community was outgrowth from the college area and from the west. There was farming and ranching in Mission Valley until the middle portion of the 20th century when the uses were converted to commercial and residential. There were dairy farms and chicken ranches adjacent to the San Diego River where now there are motels, restaurants, office complexes and regional shopping malls. There was little development north of the San Diego River until Linda Vista was developed as military housing in the 1940s. The federal government improved public facilities and extended water and sewer pipelines to the area. From Linda Vista, development spread north of Mission Valley to the Clairemont Mesa and Kearny Mesa areas. Development in these communities was mixed use and residential on moderate size lots.

Tierrasanta, previously owned by the United States Navy was developed in the 1970s. It was one of the first planned unit developments with segregation of uses. Tierrasanta and many of the communities that have developed since, such as Rancho Penasquitos and Rancho Bernardo, represent the typical development pattern in San Diego in the last 25 to 30 years: uses are well segregated with commercial uses located along the main thoroughfares, and the residential uses are located in between. Industrial uses are located in planned industrial parks.

Summary of Historic Resources within San Diego

Historic Resources within San Diego span all eras described above, from the 1769 site of the Presidio of San Diego in Old Town, to the Veterans' War Memorial Building in Balboa Park, constructed in 1950, as well as many in between. They represent a wide variety of architectural styles from various eras in the City's history. The San Diego Historical Resources Board has designated nearly 1,100 historical landmarks within the City, as well as 16 historic districts, including the Old Town Historical District, the Gaslamp Historical District, and the Naval Training Station Historical District. As of 2015, there are nearly 80 historical resources in San Diego that have been formally listed in the NRHP, and 8 National Historical Landmarks, most of which have overlapping designations with the City's historical landmarks (City of San Diego, 2014).

Significant elements of San Diego's historic built environment include railroad and maritime history, development in relationship to the automobile, the role of recreation in the development of specific industries, as well as the design and implementation of major regional planning and landscaping projects. The role of international fairs on architecture, landscape architecture and buildings, and the development of industrial and military technologies between the two world wars, are other significant elements of City history. The relationship between climate, terrain, native plant material and local gardening and horticultural practices; planning and subdivision practices from the turn of the century to the present day; and the post-war period of suburbanization are also historically important.

E.3 Regulatory Setting

Federal

The majority of applicable federal regulations concerning cultural resources are established by the National Historic Preservation Act of 1966 (NHPA) and the National Environmental Policy Act of 1969 (NEPA).

National Historic Preservation Act of 1966 (16 U.S.C. 470 et seq.)

A federal law enacted to avoid unnecessary harm to historic properties, NHPA includes regulations that apply specifically to federal land-holding agencies, but also includes regulations (Section 106) which pertain to all “undertakings” funded, permitted, or approved by any federal agency that have the potential to affect cultural resources. Provisions of NHPA establish the National Register of Historic Places (NRHP), the Advisory Council on Historic Preservation, State Historic Preservation Offices, and the federal grants-in-aid programs.

National Environmental Policy Act of 1969 (16 U.S.C. 4321, and 4331-4335, as amended)

The act establishes guidelines to “preserve important historic, cultural, and natural aspects of our national heritage, and to maintain, wherever possible, an environment that supports diversity and a variety of individual choice.” All federal actions that are subject to NEPA are considered “undertakings” subject to compliance with Section 106 of the NHPA and all NEPA requirements concerning cultural resources.

Secretary of the Interior’s Standards

The Secretary of the Interior is responsible for establishing professional standards and providing guidance related to the preservation and protection of all cultural resources listed in, or eligible for listing in, the NRHP. The Secretary of the Interior’s Standards for the Treatment of Historic Properties apply to all grants-in-aid projects assisted through the National Historic Preservation Fund, and are intended to be applied to a wide variety of resources, including buildings, structures, sites, objects, and districts. The treatment standards, developed in 1992, are entitled “The Secretary of the Interior’s Standards for the Treatment of Historic Properties” codified as 36 CFR 68. The standards address four treatments:

- **Preservation** means the act or process of applying measures necessary to sustain the existing form, integrity, and materials of a historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses on the ongoing maintenance and repair of historic materials and features, rather than extensive replacement and new construction.
- **Rehabilitation** means the act or process of making possible an efficient compatible use for a property through repair, alterations, and additions while preserving those portions or features that convey its historical, cultural, or architectural values.
- **Restoration** means the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period.

- **Reconstruction** means the act or process of depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location.

In addition, CEQA Section 15064.5(3)(b) states that, “Generally, a project that follows the Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior’s Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995), Weeks and Grimmer, shall be considered as mitigated to a level of less than a significant impact on the historical resource.”

Other Federal Legislation

Federal historic preservation legislation was initiated by the Antiquities Act of 1906 (16 U.S.C. 431-433) to protect historic and archaeological sites. The law established the procedure for issuing permits to conduct archaeological studies on federal land, as well as setting penalties for noncompliance. Permits are currently issued under this act and the Archeological Resources Protection Act of 1979 (ARPA) (16 U.S.C. 470aa-mm). The purpose of ARPA is to enhance preservation and protection of archaeological resources on public and Native American lands. The Historic Sites Act of 1935 (16 U.S.C. 461-467) states that it is national policy to “preserve for public use historic sites, buildings, and objects of national significance.”

National Register of Historic Places

Archaeological and historical sites can be given a measure of protection if they are eligible for the *NRHP* (36CFR60.4 and 36CFR800). The criterion most often applied to archaeological sites is criterion (4), which addresses the potential of a site to yield information important in prehistory or history. The NRHP criteria and other information issued by the Advisory Council on Historic Preservation, present the legal measures of significance relevant to cultural resources. The NRHP criteria are the following:

The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that:

- are associated with events that have made a significant contribution to the broad patterns of our history; or
- are associated with the lives of persons significant in our past; or
- embody the distinctive characteristics of a type, period, method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack distinction; or
- have yielded, or may be likely to yield, information important to prehistory or history [36CFR60.4 (a-d)].

In addition to meeting one or more of NRHP criteria, a cultural resource must retain integrity. To retain historic integrity a property will always possess several, and usually most, of the seven aspects of integrity – Location, Design, Setting, Materials, Workmanship, Feeling and Association. The retention of specific aspects of integrity is paramount for a property to convey its significance. Determining which of these aspects are most important to a particular property requires knowing why, where, and when the property is significant. In reference to archaeological sites, a cultural resource must have sufficient integrity so that available data can be recovered and analyzed in meaningful ways.

State

Cultural Resources

California Environmental Quality Act (Public Resources Code 21000 et seq.)(CEQA)

Under CEQA, a project that would cause a substantial adverse change in the significance of an “historical resource” is a project that may have a significant effect on the environment. (CEQA *Guidelines* Section 15064(b).) An “historical resource” is a resource that meets one of the following criteria (CEQA *Guidelines* Section 15064[a]):

- The resource is listed in or determined eligible for listing in the California Register of Historical Resources.
- The resource is included in a local register of historical resources, as defined in Section 5030.1[k] of the PRC,
- The resource is identified as significant in an historical resource survey meeting the requirements of Section 5024.1[g] of the PRC, unless the preponderance of evidence demonstrates that it is not historically or culturally significant; or
- The lead agency determines the resource to be significant as supported by substantial evidence in light of the whole record.

CEQA also requires consideration of impacts on “unique archeological sites.” (CEQA *Guidelines* Section 15069.5(c)(3).) Most archeological sites that meet the definition of a unique archeological site also meet the definition of an “historical resource.”

California Register of Historical Resources

On September 27, 1992, Assembly Bill 2881 (Statutes of 1992, Chapter 1075) was signed into law amending the Public Resources Code (PRC) as it affects historical resources (PRC Section 4850 *et seq.*) This legislation, which became effective on January 1, 1993, also created the CRHR. A historical resource must be significant at the local, state, or national level, under one or more of the following four CRHR criteria:

- It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States; or
- It is associated with the lives of persons important to local, California, or national history;

- It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or
- It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

Integrity is the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. All resources nominated for listing on the CRHR must have integrity. Resources, therefore, must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association. It must also be judged with reference to the particular criteria under which a resource is proposed for eligibility. Alterations over time to a resource or historic changes in its use may themselves have historical, cultural, or architectural significance.

It is possible that historical resources may not retain sufficient integrity to meet the criteria for listing in the NRHP, but they may still be eligible for listing in the CRHR. A resource that has lost its historic character or appearance may still have sufficient integrity for the CRHR if it maintains the potential to yield significant scientific or historical information or specific data.

Section 15064.5 of the CEQA *Guidelines* states: "Generally, a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings, shall be considered as mitigated to a level of less than a significant impact on the historical resource."

City of San Diego

The Historic Preservation Element of the City's General Plan (2008) contains a number of goals and policies that are intended to guide the preservation, protection, restoration, and rehabilitation of historical and cultural resources and maintain a sense of the City. These goals and policies are also intended to improve the quality of the built environment, encourage appreciation for the City's history and culture, maintain the character and identity of communities, and contribute to the City's economic vitality through historic preservation.

The Historical Resources Board (HRB) has been established by the City Council in accordance with the City Charter, Section 43. The Land Development Code sets forth HRB's authority, appointment and terms, meeting conduct, and powers and duties; the designation process including the nomination process, noticing and report requirements, appeals, recordation, amendments or rescission, and nomination of historical resources to state and national registers; and development regulations for historical resources. The purpose of these regulations is to protect, preserve, and, where damaged, restore the historical resources of San Diego. The historical resources regulations require that designated historical resources be preserved unless deviation findings can be made by the decision maker as part of a discretionary permit. Minor alterations consistent with the U.S. Secretary of the Interior's Standards are exempt from the

requirement to obtain a separate permit but must comply with the regulations and associated historical resources guidelines. Chapter 14 also requires review of construction and development permit applications impacting parcels containing structures 45 years old or older to determine whether or not a historical resource may exist on the parcel (SDMC 143.0212.) If a resource may be present and the project proposes a substantial alteration of the potential resource, a site-specific survey is required consistent with the City's Historical Resources Guidelines.

The Historical Resources Guidelines, located in the Land Development Manual, provide property owners, the development community, consultants and the general public explicit guidance for the management of historical resources located within the City's jurisdiction. These guidelines are designed to implement the City's Historical Resources Regulations contained in the Land Development Code (Chapter 14, Division 3, Article 2) in compliance with applicable local, state and federal policies and mandates, including, but not limited to, the City's Progress Guide and General Plan, CEQA, and Section 106 of the National Historic Preservation Act of 1966. The intent of the guidelines is to ensure consistency in the management of the City's historical resources, including identification, evaluation, preservation/mitigation and development.

According to the Land Development Manual, historical resources include all properties eligible or potentially eligible for the National Register of Historic Places, as well as those that may be significant pursuant to state and local laws and registration programs such as the California Register of Historical Resources or the City of San Diego Historical Resources Register. They include buildings, structures, objects, archaeological sites, districts or landscapes possessing physical evidence of human activities that are typically over 45 years old. Accordingly, a site-specific survey is required for any parcel containing a structure that is more than 45 years old for which a Construction Permit or Development permit is sought.

When significant historical resources are present within a given project area, mitigation to protect the resources is required prior to project implementation. The preferred alternative for mitigating impacts to historical resources is avoidance or preservation in place. If preservation is demonstrated to be infeasible, then alternative measures would be required. Preferred mitigation is to avoid affecting the resource through project redesign. If the resource cannot be entirely avoided, all prudent and feasible measures to minimize harm to the resource should be taken. Depending upon project impacts, measures can include, but are not limited to:

- a. Preparing a historic resource management plan;
- b. Adding new construction which is compatible in size, scale, materials, color and workmanship to the historic resource (such additions, whether portions of existing buildings or additions to historic districts, shall be clearly distinguishable from historic fabric);
- c. Repairing damage according to the Secretary of the Interior's Standards for Rehabilitation;
- d. Screening incompatible new construction from view through the use of berms, walls and landscaping in keeping with the historic period and character of the resource;
- e. Shielding historic properties from noise generators through the use of sound walls, double glazing and air conditioning; and

- f. Removing industrial pollution at the source of production.

In addition to the City's Municipal Code, the Historic Preservation Element of the General Plan contains a number of goals and policies whose purpose is to guide the preservation, protection, restoration, and rehabilitation of historical and cultural resources and maintain a sense of the City. These goals and policies are also intended to improve the quality of the built environment, encourage appreciation for the City's history and culture, maintain the character and identity of communities, and contribute to the City's economic vitality through historic preservation.

E.4 Impacts and Mitigation Measures

Significance Criteria

According to the City of San Diego's CEQA Significance Determination Thresholds, a significant impact with regard to historic resources could occur if implementation of the CAP results in the following:

- An alteration, including the adverse physical or aesthetic effects and/or the destruction of a prehistoric or historic building (including an architecturally significant building), structure, or object or site;
- Any impact to existing religious or sacred uses within the potential impact area; or
- The disturbance of any human remains, including those interred outside of formal cemeteries.

A "substantial adverse change" to an historical resource is defined in Section 15064.5(b)(1) of the CEQA *Guidelines* as "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired." The significance of a historical resource is "materially impaired," according to Guidelines Section 15064(b)(2), when a project demolishes or materially alters, in an adverse manner, those physical characteristics of the resource that:

- convey its historic significance and that justify its inclusion in, or eligibility for inclusion in, the CRHR (including a determination by the lead agency that the resource is eligible for inclusion in the CRHR);
- account for its inclusion in a local register of historical resources adopted by local agency ordinance or resolution (in accordance with PRC Section 5020.1(k)); or
- account for its identification in a historical resources survey that meets the requirement of PRC Section 5024.1(g), including, among other things, that "the resource is evaluated and determined by the [State Office of Historic Preservation] to have a significance rating of Category 1 to 5 on DPR Form 523," unless the lead agency "establishes by a preponderance of evidence that the resource is not historically or culturally significant."

The State CEQA *Guidelines* indicate that projects that are consistent with the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings

generally “shall be considered as mitigated to a level of less than a significant impact on the historical resource” (Section 15064.5(b)(3)).

Impact Analysis

As indicated in Table 2-5 in Chapter 2, Project Description, the CAP strategies, actions, and supporting measures that could have an impact on historic resources include:

- **Action 1.1 Residential Energy Conservation and Disclosure Ordinance and Action 2.1 Community Choice Aggregation Program or Similar Program.** These actions could encourage retrofits of existing buildings to increase energy efficiency and install small-scale renewable energy facilities, such as rooftop solar. If this were to occur in historic buildings or districts, it could affect their integrity and ability to convey their historical significance.
- **Actions 3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas and Action 3.6 Implement Transit-Oriented Development within Transit Priority Areas.** These actions would result in in-fill development and redevelopment concentrated in identified Transit Priority Areas. This could result in the demolition or alteration of known historical resources and the accidental discovery and damage to previously unknown cultural resources.

Issue 1: Would implementation of the CAP cause a substantial adverse change in the significance of a historical resource, as defined in Section 15064.5, or have other physical or aesthetic effects to a prehistoric or historic building, structure, object or site?

The demolition or substantial alteration of a resource listed on, or formally determined eligible for, the National Register of Historic Places or the California Register of Historical Resources, including contributors to National Register or California Register Historic Districts; or listed on the San Diego Historical Resources Register, including contributors to San Diego Register Historic Districts; or that meet the CEQA criteria for historical resources would represent a significant direct impact to historical resources. Additionally, grading, excavation and other ground disturbing activities associated with development projects that affect significant archaeological sites or traditional cultural properties would represent a significant direct impact to historical resources. While the CAP does not specifically propose demolition or substantial alteration of a resource or ground disturbing activities such as grading or excavation, it can be assumed that implementation of the CAP could have the potential to result in significant direct and/or indirect impacts to historical resources. Any significant impacts are most likely to occur through CAP Action 1.1 Residential Energy Conservation, Benchmarking, and Disclosure Ordinance, which may encourage residential energy efficiency retrofits; and CAP Action 2.1 Community Choice Aggregation Program, which may encourage distributed and large-scale renewable energy facilities. Implementation of the General Plan policies and compliance with the City’s Historical Resources Regulations and guidelines outlined in Section E.3, Regulatory Setting, would serve to reduce impacts to a degree; however, existing legislation, including the California Solar Rights Act, currently limits the City’s ability to require modifications to the placement or design of solar installations on historic and potentially historic resources; thereby increasing the likelihood that such resources may be adversely impacted as a result of solar installations and other retrofit actions.

Impacts to resources associated with the built environment may include substantial alteration, relocation, or demolition of historic buildings, structures, objects, landscapes, and sites. If important archaeological sites occur on property that is proposed for development, construction activities, such as grading and excavation, could result in significant impacts. Archaeological resources may be difficult to detect prior to construction activities, as they are generally located below the ground surface. Most archaeological sites have some surface expression and many have been found within inches of the ground surface. Therefore, the potential to affect important archaeological sites exists if a development activity requires even minimal grading and/or excavation. The likelihood of encountering archaeological resources is greatest on sites that have been minimally excavated in the past (e.g., undeveloped parcels, vacant lots and lots containing surface parking; undeveloped areas around historic buildings; under buildings with post, pier, slab, or shallow wall foundations without basements; etc.). Previously excavated areas are generally considered to have a low potential for archaeological resources, since the soil containing the archaeological resources has been removed. However, under certain circumstances, further evaluation would be required when previously excavated and/or graded project sites are located within areas of known archaeological sensitivity (e.g., recorded sites, designated sites, etc.), or are identified as traditional cultural properties. In addition, building demolition and surface clearance could result in impacts to archaeological resources.

Significance of Impact

Impacts to prehistoric or historic buildings, structures, objects, or sites associated with CAP Action 1.1 Residential Energy Conservation and Disclosure Ordinance (residential energy efficiency retrofits), as well as CAP Action 2.1 Community Choice Aggregation Program or Another Program (which may encourage distributed and large-scale renewable energy facilities), have the potential to be significant.

Mitigation Framework

The City of San Diego's General Plan, combined with federal, state, and local regulations, provide a regulatory framework for developing project-level historical resources mitigation measures for future discretionary projects. All development projects with the potential to affect historical resources—such as designated historical resources; historical buildings, districts, landscapes, objects, and structures; important archaeological sites; and traditional cultural properties—are subject to site-specific review in accordance with the City's Historical Resources Regulations and Historical Resources Guidelines, through the discretionary process. The following Mitigation Framework measure (HIST-1) would be required of all future development projects with the potential to impact significant archaeological resources.

Mitigation Measure HIST-1: Archaeological Resources

Prior to issuance of any permit for a future development project that could directly affect an archaeological resource, the City shall require the following steps be taken to determine: (1) the presence of archaeological resources and (2) the appropriate mitigation for any significant resources which may be impacted by a development activity. Sites may include, but are not limited to, residential and commercial properties, privies, trash pits, building foundations, and industrial features representing the contributions of people from diverse

socio-economic and ethnic backgrounds. Sites may also include resources associated with prehistoric Native American activities.

Initial Determination

The likelihood for the project site to contain historical resources shall be determined by reviewing site photographs and existing historic information (e.g. Archaeological Sensitivity Maps, the Archaeological Map Book, and the City's "Historical Inventory of Important Architects, Structures, and People in San Diego") and conducting a site visit. If there is any evidence that the site contains archaeological resources, then a historic evaluation consistent with the City's Historical Resources Guidelines (City Guidelines) would be required. All individuals conducting any phase of the archaeological evaluation program must meet professional qualifications in accordance with the City Guidelines.

Step 1: Based on the results of the Initial Determination, if there is evidence that the site contains historical resources, preparation of a historic evaluation is required. The evaluation report would generally include background research, field survey, archeological testing and analysis. Before actual field reconnaissance would occur, background research is required which includes a record search at the SCIC at San Diego State University and the San Diego Museum of Man. A review of the Sacred Lands File maintained by the NAHC must also be conducted at this time. Information about existing archaeological collections shall also be obtained from the San Diego Archaeology Center and any tribal repositories or museums.

In addition to the record searches mentioned above, background information may include, but is not limited to: examining primary sources of historical information (e.g., deeds and wills), secondary sources (e.g., local histories and genealogies), Sanborn Fire Maps, and historic cartographic and aerial photograph sources; reviewing previous archeological research in similar areas, models that predict site distribution, and archeological, architectural, and historical site inventory files; and conducting informant interviews. The results of the background information shall be included in the evaluation report.

Once the background research is complete, a field reconnaissance must be conducted by individuals whose qualifications meet the standards outlined in the City Guidelines. Consultants are encouraged to employ innovative survey techniques when conducting enhanced reconnaissance, including, but not limited to, remote sensing, ground penetrating radar, and other soil resistivity techniques as determined on a case-by-case basis. Native American participation is required for field surveys when there is likelihood that the project site contains prehistoric archaeological resources or traditional cultural properties. If through background research and field surveys historical resources are identified, then an evaluation of significance must be performed by a qualified archaeologist.

Step 2: Once a historical resource has been identified, a significance determination must be made. Tribal representatives and/or Native American monitors will be involved in making recommendations regarding the significance of prehistoric archaeological sites during this phase of the process. The testing program may require reevaluation of the proposed project in consultation with the Native American representative which could result in a combination of project redesign to avoid and/or preserve significant resources as well as mitigation in the form of data recovery and monitoring (as recommended by the qualified archaeologist and Native American representative). An archaeological testing program will be required which includes evaluating the horizontal and vertical dimensions of a site, the

chronological placement, site function, artifact/ecofact density and variability, presence/absence of subsurface features, and research potential. A thorough discussion of testing methodologies, including surface and subsurface investigations, can be found in the City Guidelines.

The results from the testing program shall be evaluated against the Significance Thresholds found in the City Guidelines. If significant historical resources are identified within the Area of Potential Effect, the site may be eligible for local designation. At this time, the final testing report must be submitted to Historical Resources Board staff for eligibility determination and possible designation. An agreement on the appropriate form of mitigation is required prior to distribution of a draft environmental document. If no significant resources are found, and site conditions are such that there is no potential for further discoveries, then no further action is required. Resources found to be non-significant as a result of a survey and/or assessment will require no further work beyond documentation of the resources on the appropriate Department of Parks and Recreation (DPR) site forms and inclusion of results in the survey and/or assessment report. If no significant resources are found, but results of the initial evaluation and testing phase indicates there is still a potential for resources to be present in portions of the property that could not be tested, then mitigation monitoring is required.

Step 3: Preferred mitigation for historical resources is to avoid the resource through project redesign. If the resource cannot be entirely avoided, all prudent and feasible measures to minimize harm shall be taken. For archaeological resources where preservation is not an option, a Research Design and Data Recovery Program is required, which includes a Collections Management Plan for review and approval. The data recovery program shall be based on a written research design and is subject to the provisions as outlined in CEQA, Section 21083.2. The data recovery program must be reviewed and approved by the City's Environmental Analyst prior to draft CEQA document distribution. Archaeological monitoring may be required during building demolition and/or construction grading when significant resources are known or suspected to be present on a site, but cannot be recovered prior to grading due to obstructions such as, but not limited to, existing development or dense vegetation.

A Native American observer must be retained for all subsurface investigations, including geotechnical testing and other ground-disturbing activities, whenever a Native American Traditional Cultural Property or any archaeological site located on City property or within the Area of Potential Effect of a City project would be impacted. In the event that human remains are encountered during data recovery and/or a monitoring program, the provisions of Public Resources Code Section 5097 must be followed. In the event that human remains are discovered during project grading, work shall halt in that area and the procedures set forth in the California Public Resources Code (Section 50987.98) and State Health and Safety Code (Section 7050.5), and in the federal, state, and local regulations described above shall be undertaken. These provisions are outlined in the Mitigation Monitoring and Reporting Program (MMRP) included in the environmental document. The Native American monitor shall be consulted during the preparation of the written report, at which time they may express concerns about the treatment of sensitive resources. If the Native American community requests participation of an observer for subsurface investigations on private property, the request shall be honored.

Step 4: Archaeological Resource Management reports shall be prepared by qualified professionals as determined by the criteria set forth in Appendix B of the City Guidelines. The discipline shall be tailored to the resource under evaluation. In cases involving complex resources, such as traditional cultural properties, rural landscape districts, sites involving a combination of prehistoric and historic archaeology, or historic districts, a team of experts will be necessary for a complete evaluation.

Specific types of historical resource reports are required to document the methods (see Section III of the City Guidelines) used to determine the presence or absence of historical resources; to identify the potential impacts from proposed development and evaluate the significance of any identified historical resources; to document the appropriate curation of archaeological collections (e.g. collected materials and the associated records); in the case of potentially significant impacts to historical resources, to recommend appropriate mitigation measures that would reduce the impacts to below a level of significance; and to document the results of mitigation and monitoring programs, if required.

Archaeological Resource Management reports shall be prepared in conformance with the California Office of Historic Preservation "Archaeological Resource Management Reports: Recommended Contents and Format" (see Appendix C of the City Guidelines), which will be used by Environmental Analysis Section staff in the review of archaeological resource reports. Consultants must ensure that archaeological resource reports are prepared consistent with this checklist. This requirement will standardize the content and format of all archaeological technical reports submitted to the City. A confidential appendix must be submitted (under separate cover) along with historical resources reports for archaeological sites and traditional cultural properties containing the confidential resource maps and records search information gathered during the background study. In addition, a Collections Management Plan shall be prepared for projects which result in a substantial collection of artifacts and must address the management and research goals of the project and the types of materials to be collected and curated based on a sampling strategy that is acceptable to the City. Appendix D (Historical Resources Report Form) may be used when no archaeological resources were identified within the project boundaries.

Step 5: For Archaeological Resources: All cultural materials, including original maps, field notes, non-burial related artifacts, catalog information, and final reports recovered during public and/or private development projects must be permanently curated with an appropriate institution, one which has the proper facilities and staffing for insuring research access to the collections consistent with state and federal standards. In the event that a prehistoric and/or historic deposit is encountered during construction monitoring, a Collections Management Plan would be required in accordance with the project MMRP. The disposition of human remains and burial related artifacts that cannot be avoided or are inadvertently discovered is governed by state (i.e., Assembly Bill 2641 and California Native American Graves Protection and Repatriation Act of 2001) and federal (i.e., Native American Graves Protection and Repatriation Act) law, and must be treated in a dignified and culturally appropriate manner with respect for the deceased individual(s) and their descendants. Any human bones and associated grave goods of Native American origin shall be turned over to the appropriate Native American group for repatriation.

Arrangements for long-term curation must be established between the applicant/property owner and the consultant prior to the initiation of the field reconnaissance, and must be included in the archaeological survey, testing, and/or data recovery report submitted to the

City for review and approval. Curation must be accomplished in accordance with the California State Historic Resources Commission's Guidelines for the Curation of Archaeological Collection (dated May 7, 1993) and, if federal funding is involved, 36 Code of Federal Regulations 79 of the Federal Register. Additional information regarding curation is provided in Section II of the City Guidelines.

Significance after Mitigation

Implementation of the General Plan policies and compliance with the City's Historical Resources Regulations and guidelines outlined in the Regulatory Setting section would serve to reduce impacts to a degree, but cannot guarantee that all future project level impacts will be avoided or mitigated to a level less than significant. In addition, existing legislation, including the California Solar Rights Act, currently limits the City's ability to require modifications to the placement or design of solar installations on historic and potentially historic resources; thereby increasing the likelihood that such resources may be adversely impacted as a result of solar installations and other retrofit actions. Because the degree of impact and applicability, feasibility, and success of these measures cannot be accurately predicted for each specific project at this time, the program level impact related to historical resources is considered significant and unavoidable.

F. Transportation and Circulation

F.1 Introduction

This section analyzes potential transportation impacts that could result from implementation of the City of San Diego (City) Climate Action Plan (CAP).

F.2 Environmental Setting

San Diego's transportation system provides for the movement of people and goods through a network of highways and roads, public transit, freight railroads, airports, seaports, and intermodal facilities. Local streets, paths and trails serve to provide local access and connections to the regional network. The transportation system provides travel for residents, employees, visitors, and goods movement and creates a system that supports City and regional economic needs. To accommodate the various travel needs, the City's transportation network includes numerous modes of transportation.

The transportation system includes interstate and State highways, local arterial roadways, public transportation systems, nonmotorized transportation facilities, maritime and aviation facilities, and land ports of entry. The roadway system is an interconnected network of interstates, freeways, highways, toll roads, arterial streets, and local streets. This roadway network allows for the movement of private vehicles, commercial vehicles, buses, and heavy trucks. The regional public transit system includes local and regional bus operations, regional and interregional commuter rail services, and light rail service. The freight railroad network includes three freight rail lines serving cargo and goods services.

Nonmotorized transportation facilities generally include walkways and bikeways. Often, facilities such as bikeways share space with roadway facilities. The airport system consists of commercial, general, and military aviation facilities serving passenger, freight, business, recreational, and military needs. Individual components of the regional transportation network are described in the following sections.

Streets and Highways

San Diego has a well-developed and relatively uncongested highway system. Four major interstate freeways and six State highways serve the City. The average daily round-trip commute ranks fifth best compared to the 20 largest metropolitan areas in the nation. Since 1980, more than 1,000 miles of streets and highways have been added to the San Diego region. Roadways are categorized into the following street classifications and functions:

Freeway: A street that is designed to carry through traffic, and is fully access controlled by grade separations, interchanges, and ramp connections. It normally is maintained by the California State Department of Transportation (Caltrans) and is constructed to State criteria, and varies in width from four to eight or more lanes.

Prime Arterial: A street that primarily provides a network connecting vehicles and transit to other primary arterials and to the freeway system. It carries heavy vehicular movement while providing low pedestrian movement and moderate bicycle and transit movements. It has a raised center median, bicycle lanes, street trees, traffic safety street lighting, sidewalks, and no access from abutting property. It may include underground utilities.

Major Arterial: A street that primarily provides a network connecting vehicles and transit to other major arterials and primary arterials, and to the freeway system and secondarily providing access to abutting commercial and industrial property. It carries moderate-to-heavy vehicular movement, low-to-high pedestrian and bicycle movements, and moderate-to-high transit movement. It has a raised center median, street trees, traffic safety, street lighting, and sidewalks, and may include landscaping, pedestrian-scale lighting, underground utilities, on-street parking, and/or bike lanes.

Collector Street: A street that primarily provides movement between local/collector streets and streets of higher classification and, secondarily, provides access to abutting property. It carries low- to moderate-vehicular movement, low- to heavy-pedestrian movement, moderate- to heavy-bicycle movement, and low- to moderate-transit movement. It has on-street parking, street trees, traffic safety street lighting, and sidewalks. It may also include landscaping, pedestrian-scale lighting, and underground utilities.

Local Street: A street that provides, primarily, direct access to abutting property. It carries low vehicular movement, low- to heavy-pedestrian movement, and low- to moderate-bicycle movement. It has on-street parking, street trees, traffic safety street lighting, and sidewalks. It may include landscaping, pedestrian-scale lighting, and underground utilities.

Bikeways

The City of San Diego has a developed network of designated Class I, II, and III bikeways. In San Diego, many Class I bikeways provide critical links between communities that would otherwise be totally separated for bicyclists. Two examples of these critical links are the Rose Canyon and Murphy Canyon paths, which provide for convenient bicycle travel in areas with no other alternative route adjacent to busy freeways. Most of the Class II bike lane facilities are located in areas of the City developed within the last 30 years, and some are of significant length. Class III bikeways are located both along major arterials and along quiet neighborhood streets.

Table 3.F-1 presents the existing bikeways in San Diego by classification.

The City of San Diego is committed to supporting bicycling as a form of mobility and recreation. As part of the City's long-term vision contained in the General Plan, the City supports the planning and development of bicycle-friendly development projects, streets, and neighborhoods for both commuter and recreational riders. To this end, the City has adopted a citywide Bicycle Master Plan (BMP), which guides development, maintenance, and support of the bicycle network, identifies existing and future needs, and provides specific recommendations for facilities and programs over the next 20 years. The BMP contains detailed policies, action items, and network maps, and addresses issues such as bikeway planning, community involvement, facility design, bikeway classifications, multimodal integration, safety and education, and support facilities. The BMP also identifies specific bicycling programs and addresses network implementation, maintenance and funding strategies.

**TABLE 3.F-1
CLASSIFICATION AND EXISTING BIKEWAYS IN SAN DIEGO**

Classification	Definition	Existing Facilities
Class I (Bike Path)	Consists of a paved right-of way completely separated from any street or highway.	Mission Valley, Mission Bay Park, along the beachfronts in Pacific Beach and Mission Beach, Carmel Valley, Rancho Peñasquitos, Mira Mesa, Rose Canyon, near the San Diego Airport, and in the Mission Trails Park
Class II (Bike Lane)	Provides a striped and stenciled lane for one-way travel on a street or highway; helps improve the visibility of bicyclists.	Rancho Bernardo, Rancho Peñasquitos, Sabre Springs, Mira Mesa, University City, Carmel Valley, and Tierrasanta, Genesee Avenue, Linda Vista, Kearny Villa, and Black Mountain Roads, Aero and Harbor Drives, Friars and Mission Gorge Roads, Nimitz and Beyer Boulevards, and Carmel Mountain, Torrey Pines, and Otay Mesa Roads
Class III (Bike Route)	Provides for shared use with pedestrian or motor vehicle traffic and is identified only by signage; recommended when there is enough right-of-way for bicyclists and motorists to safely pass.	Miramar Road, Rancho Peñasquitos Boulevard, Pacific Highway, 4th, 5th, and 6th Avenues, Camino Ruiz, and Saturn and Del Sol Boulevards, Orange Avenue in City Heights, Gold Coast Drive in Mira Mesa, Fort Stockton Drive in Mission Hills, Hornblend Avenue in Pacific Beach, L Street near Golden Hill, and Iris Avenue in Otay Mesa-Nestor
Freeway Shoulder	Locations along freeway shoulder where Caltrans permits bike use.	I-5, SR 52
Bicycle Boulevard	Local roads or residential streets that have been enhanced with traffic calming and other treatments to facilitate safe and convenient bicycle travel. Accommodate bicyclists and motorists in the same travel lanes, without specific vehicle or bicycle lane delineation. Prioritize bicycle travel above vehicular travel. Not recognized by Caltrans Highway Design Manual.	New Classification
Cycle Track	Hybrid type bicycle facility that combines the experience of a separated path with the on-street infrastructure of a conventional Bike Lane. Located in roadway right-of-ways but separated from vehicle lanes by physical barriers or buffers. Provide for one-way bicycle travel in each direction adjacent to vehicular travel lanes and are exclusively for bicycle use. Not recognized by Caltrans Highway Design Manual.	New Classification

SOURCE: General Plan PEIR, 2008; Bicycle Master Plan, 2013.

Transit

Transit services are provided for trips within the City and region and for trips between San Diego and adjacent areas. The current transit network includes local and express bus, light rail (trolley), and Coaster commuter rail services. Within the San Diego region, transit services are provided by the Metropolitan Transit System (MTS) in the southern metropolitan area (including the City of San Diego) and the North County Transit District (NCTD) in the northern part of the county (with Coaster and bus services that tie into the City of San Diego). Ferry service (privately operated)

also is available between San Diego and Coronado. In addition, there are demand-responsive transit services that provide transit service in sparsely traveled areas and for travelers with special needs that cannot be well served by fixed-route service.

The Coaster and Amtrak trains provide passenger rail service to the City of San Diego along the coastal rail corridor. Passenger and freight trains also share the predominately single-track corridor.

Transit service in the City includes the following (San Diego, 2011):

- The San Diego Trolley system operates over 53.5 miles on three routes with 53 stations on the Blue Line, Orange Line, and Green Line. The trolley connects the City with East San Diego County, San Diego State University, Qualcomm Stadium, Old Town, Downtown, and the Mexican Border. A new trolley extension is planned to extend service to UC San Diego and La Jolla.
- Passenger rail service is provided by Amtrak, Metrolink, and Coaster commuter trains. Amtrak operates ten trains to San Diego. The Coaster operates during peak hours connecting San Diego County coastal cities. More than 20 trains run on weekdays, with service on Saturdays. In March 2008, North County Transit District launched its newest addition, the east-west Sprinter light-rail train system between Oceanside, Vista, San Marcos and Escondido. The 22-mile long rail system runs east-west - along the Highway 78 corridor - serving 15 stations.
- The California High Speed Rail is planned to pass through San Diego and a trip from San Diego to Los Angeles would be approximately 80 minutes.
- The Metropolitan Transit System operates 29 bus routes covering 635 miles.

F.3 Regulatory Setting

This section identifies the laws, regulations, policies, and programs related to the physical environment that pertain to the Project's effects on transportation and circulation on the highways and local roadways within San Diego County.

Federal

MAP-21

The Moving Ahead for Progress in the 21st Century Act (MAP-21) was passed by Congress on June 29, 2012, and signed into law by President Obama on July 6, 2012. MAP-21 provides \$105 billion in funding for surface transportation programs for fiscal years 2013 and 2014. This law replaced the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), which was passed in 2005 and extended ten times.

Federal highway standards are implemented in California by Caltrans (see discussion under "State" below).

State

Caltrans is responsible for planning, designing, constructing, and maintaining all State-owned and -operated roadways in San Diego County. Any improvements or modifications to the State highway system within San Diego County must be approved by Caltrans. San Diego County and other local agencies have no ability to unilaterally make improvements to the State highway system.

California Complete Streets Act of 2008

This law requires cities and counties to include complete streets policies as part of their general plans so that roadways are designed to safely accommodate all users, including bicyclists, pedestrians, transit riders, children, the elderly, and persons with disabilities, as well as motorists. This Act will complement an existing policy, which directs Caltrans to “fully consider the needs of non-motorized travelers (including pedestrians, bicyclists, and persons with disabilities) in all programming, planning, maintenance, construction, operations and project development activities and products.” As of January 2011, any substantive revision of the circulation element in the general plan of a California local government must include complete streets provisions.

California Transportation Development Act (TDA)

The California TDA provides a dedicated State funding source for use by local jurisdictions at the county level to improve existing public transportation and encourage regional public transportation coordination. Transit agency audits are performed on a triennial basis to ensure that transit agencies are meeting minimum service performance standards (e.g., passengers per revenue mile and hour, annual passengers served etc.). Use of TDA monies is also tied to identifying and allocating funds to unmet transit needs, a process that requires local transportation planning agencies to identify and assess unmet transit needs on an annual basis. Unmet transit needs are defined in the Regional Transportation Plan (RTP) as transit service to those residents who use or would use public transportation regularly, if available, to meet their life expectations, such as trips for medical and dental services, shopping, employment, personal business, education, social services, and recreation. TDA funds can be allocated to non-transit uses if there are no unmet transit needs within the jurisdiction that are reasonable to meet with the use of TDA funds. Reasonableness is determined by community interest, equity, potential ridership, cost effectiveness, operational feasibility, and funding.

California Air Resources Board (CARB)

CARB, a part of the California EPA (Cal/EPA), is responsible for the coordination and administration of both federal and State air pollution control programs within California. With respect to transportation the California Air Resources Board reviews and approves metropolitan planning organizations (MPOs) implementation of Senate Bill 375 (SB 375) within each region of California.

Senate Bill 375

SB 375, which establishes mechanisms for the development of regional targets for reducing passenger vehicle greenhouse gas (GHG) emissions, was adopted by the State on September 30,

2008. On September 23, 2010, CARB adopted the vehicular GHG emissions reduction targets that had been developed in consultation with the MPOs; the targets require a seven to eight percent reduction by 2020 and between 13 to 16 percent reduction by 2035 for each MPO. SB 375 recognizes the importance of achieving significant GHG reductions by working with cities and counties to change land use patterns and improve transportation alternatives. Through the SB 375 process, MPOs will work with local jurisdictions in the development of sustainable communities strategies (SCS) designed to integrate development patterns and the transportation network in a way that reduces GHG emissions while meeting housing needs and other regional planning objectives.

Regional

Congestion Management Program (CMP)

The CMP is the State legislature's effort to reduce congestion on highways and local regionally significant roadways in California (Government Code Section 65089). It includes a land use analysis program to address regional transportation impacts of local land use decisions. It stipulates that a two-tiered review of affected CMP roadways must be completed for proposed residential, commercial, retail, and industrial development in the county. The first tier is a qualitative assessment of consistency with the designated Congestion Management Agency (in this case, SANDAG) regional planning documents and initiatives. The second tier determines whether the development project generates 125 or more peak-hour trips or 500 or more daily trips. Development projects that meet the tier two requirements must be evaluated for significant impacts per the CMP significance criteria under CEQA. Specific projects excluded from this requirement are high-density residential and mixed-use projects within one-quarter mile of a fixed-rail passenger station and low-income housing.

San Diego Association of Governments (SANDAG)

SANDAG serves as a forum for public decision making on regional issues such as growth, transportation, and land use in San Diego County and is comprised of representatives from each of the county's local jurisdictions, including the City of San Diego. SANDAG programs such as the Regional Comprehensive Plan (RCP) and RTP are pertinent to the City of San Diego's General Plan efforts.

SANDAG 2050 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS)

SANDAG adopted the 2050 RTP/SCS on October 28, 2011. The RTP/SCS serves as the region's comprehensive long-range transportation planning document by encouraging public policy decisions that will result in balanced investments for a wide range of multimodal transportation improvements. The RTP/SCS reflects a region-specific, balanced multimodal plan that achieves the intent of SB 375, and can be implemented through existing and planned programs or policies. The RTP/SCS consists of strategies to guide new policies and infrastructure development based on recent household and job growth forecasts, market demand and economic studies, and transportation studies.

City of San Diego General Plan

The following policies from the Mobility Element of the City of San Diego General Plan, adopted 2008, are applicable to transportation and circulation.

Walkable Communities

- ME-A.1 Design and operate sidewalks, streets, and intersections to emphasize pedestrian safety and comfort through a variety of street design and traffic management solutions, including but not limited to those described in the Pedestrian Improvements Toolbox, Table ME-1.
- ME-A.2 Design and implement safe pedestrian routes.
- a. Collaborate with appropriate community groups, and other interested private and public sector groups or individuals to design and implement safe pedestrian routes to schools, transit, and other highly frequented destinations. Implement needed improvements and programs such as wider and non-contiguous sidewalks, more visible pedestrian crossings, traffic enforcement, traffic calming, street and pedestrian lighting, pedestrian trails, and educating children on traffic and bicycle safety.
 - b. Promote “Walking School Bus” efforts where parents or other responsible adults share the responsibility of escorting children to and from school by foot or bicycle.
 - c. When new schools are planned, work with school districts and affected communities to locate schools so that the number of students who can walk to school safely is maximized.
 - d. Implement Crime Prevention Through Environmental Design (CPTED) measures to reduce the threat and incidence of crime in the pedestrian environment (see also Urban Design Element, Policy UD-A.17).
 - e. Ensure that there are adequate law enforcement, code enforcement, and litter and graffiti control to maintain safe and attractive neighborhoods.
 - f. Provide adequate levels of lighting for pedestrian safety and comfort.
- ME-A.3 Engage in a public education campaign to increase drivers’ awareness of pedestrians and bicyclists, and to encourage more courteous driving.
- ME-A.4 Make sidewalks and street crossings accessible to pedestrians of all abilities.
- a. Meet or exceed all federal and State requirements.
 - b. Provide special attention to the needs of children, the elderly, and people with disabilities.
 - c. Maintain pedestrian facilities to be free of damage or trip hazards.
- ME-A.5 Provide adequate sidewalk widths and clear path of travel as determined by street classification, adjoining land uses, and expected pedestrian usage.
- a. Minimize obstructions and barriers that inhibit pedestrian circulation.

- b. Consider pedestrian impacts when designing the width and number of driveways within a street segment.

ME-A.6 Work toward achieving a complete, functional and interconnected pedestrian network.

- a. Ensure that pedestrian facilities such as sidewalks, trails, bridges, pedestrian-oriented and street lighting, ramps, stairways and other facilities are implemented as needed to support pedestrian circulation. Additional examples of pedestrian facilities are provided in the Pedestrian Improvements Toolbox, Table ME-1.
 - 1. Close gaps in the sidewalk network.
 - 2. Provide convenient pedestrian connections between land uses, including shortcuts where possible.
 - 3. Design grading plans to provide convenient and accessible pedestrian connections from new development to adjacent uses and streets.
- b. Link sidewalks, pedestrian paths and multi-purpose trails into a continuous region wide network where possible (see also Recreation Element, Policy RE-D.6).
- c. Provide and maintain trash and recycling receptacles, and restrooms available to the public where needed.
- d. Address pedestrian needs as an integral component of community and public facilities financing plan updates and amendments, other planning studies and programs, and the development project review process.
- e. Routinely accommodate pedestrian facilities and amenities into private and public plans and projects.

ME-A.7 Improve walkability through the pedestrian-oriented design of public and private projects in areas where higher levels of pedestrian activity are present or desired.

- a. Enhance streets and other public rights-of-way with amenities such as street trees, benches, plazas, public art or other measures including, but not limited to those described in the Pedestrian Improvement Toolbox, Table ME-1 (see also Urban Design Element, Policy UD-A.10).
- b. Design site plans and structures with pedestrian-oriented features (see also Urban Design Element, Policies UD-A.6, UD-B.4, and UD-C.6).
- c. Encourage the use of non-contiguous sidewalk design where appropriate to help separate pedestrians from auto traffic. In some areas, contiguous sidewalks with trees planted in grates adjacent to the street may be a preferable design.
- d. Enhance alleys as secure pathways to provide additional pedestrian connections.
- e. Implement traffic calming measures to improve walkability in accordance with Policy ME-C.5.
- f. When existing sidewalks are repaired or replaced, take care to retain sidewalk stamps and imprints that are indicators of the age of a particular neighborhood, or that contribute to the historic character of a neighborhood.

- ME-A.8 Encourage a mix of uses in villages, commercial centers, transit corridors, employment centers and other areas as identified in community plans so that it is possible for a greater number of short trips to be made by walking.
- ME-A.9 Continue to collaborate with regional agencies, school districts, community planning groups, community activists, public health professionals, developers, law and code enforcement officials, and others, to better realize the mobility, environmental, social, and health benefits of walkable communities.

Transit First

- ME-B.1 Work closely with regional agencies and others to increase transit ridership and mode share through increased transit service accessibility, frequency, connectivity, and availability.
- a. Develop an urban network of routes that operate with a base, mid-day service frequency of ten-minute intervals or better.
 - b. Provide transit routes that offer efficient connections between highly frequented origins and destinations.
 - c. Enhance overall transit customer experience through attention to safety, station areas, vehicles, seating, and other factors.
- ME-B.2 Support the provision of higher-frequency transit service and capital investments to benefit higher-density residential or mixed-use areas; higher-intensity employment areas and activity centers; and community plan-identified neighborhood, community, and urban villages; and transit-oriented development areas.
- ME-B.3 Design and locate transit stops/stations to provide convenient access to high activity/density areas, respect neighborhood and activity center character, implement community plan recommendations, enhance the users' personal experience of each neighborhood/center, and contain comfortable walk and wait environments for customers (see also Urban Design Element, Policy UD-A.9).
- ME-B.4 Collaborate with regional agencies to evaluate the need for, and design of, park-and-ride spaces at transit stations based on the character of the neighborhood, community plan recommendations, and the stations role in the regional transit system (see also Urban Design Element, Policies UD-A.11 and UD-A.12).
- ME-B.5 Integrate the regional transit system with the intercity rail network.
- ME-B.6 Work closely with regional agencies to achieve a transit system that is accessible to persons with disabilities.
- ME-B.7 Support efforts to develop additional transportation options for non-driving older adults and persons with disabilities, including:
- Expansion of the regional database of public and private/nonprofit transportation providers;
 - Development of innovative programs to link a wide range of transportation providers with persons in need; and
 - Identification of transportation providers and programs that could assist in evacuating persons in need, as a part of emergency and disaster preparedness

plans that are referenced in the Public Facilities Element, Section P (see also Land Use Element, Policy LU-I.10).

- ME-B.8 Support efforts to use alternative fuels in transit vehicles to help implement air quality and energy conservation goals.
- ME-B.9 Make transit planning an integral component of long range planning documents and the development review process.
- a. Identify recommended transit routes and stops/stations as a part of the preparation of community plans and community plan amendments, and through the development review process.
 - b. Plan for transit-supportive villages, transit corridors, and other higher-intensity uses in areas that are served by existing or planned higher-quality transit services, in accordance with Land Use and Community Planning Element, Sections A and C.
 - c. Proactively seek reservations or dedications of right-of-way along transit routes and stations through the planning and development review process.
 - d. Locate new public facilities that generate large numbers of person trips, such as libraries, community service centers, and some recreational facilities in areas with existing or planned transit access.
 - e. Design for walkability in accordance with the Urban Design Element, as pedestrian supportive design also helps create a transit supportive environment.
 - f. Address rail corridor safety in the design of development adjacent to or near railroad rights-of-way.
- ME-B.10 Implement transit priority measures to help bypass congested areas. Priority measures include, but are not limited to, transit signal priority, queue jumpers, exclusive transit lanes, transit ways, use of freeway shoulders, and direct access ramps to freeway High Occupancy Vehicle (HOV) facilities.

Street and Freeway System

- ME-C.2e Provide rights-of-way for designated HOV facilities and transit facilities on City streets where feasible.
- ME-C.4c Encourage community participation in planning, assessing, and prioritizing the life cycle management of the circulation system.

Transportation Demand Management

- ME-E.1 Support and implement TDM strategies including, but not limited to: alternative modes of transportation, alternative work schedules, and telework.
- ME-E.2 Maintain and enhance personal mobility options by supporting public and private transportation projects that will facilitate the implementation of Transportation Demand Management (TDM) strategies.
- ME-E.3 Emphasize the movement of people rather than vehicles.
- ME-E.4 Promote the most efficient use of the City's existing transportation network.

- ME-E.5 Support SANDAG's efforts to market TDM benefits to employers and identify strategies to reduce peak period employee commute trips.
- ME-E.6 Require new development to have site designs and on-site amenities that support alternative modes of transportation. Emphasize pedestrian and bicycle-friendly design, accessibility to transit, and provision of amenities that are supportive and conducive to implementing TDM strategies such as car sharing vehicles and parking spaces, bike lockers, preferred rideshare parking, showers and lockers, on-site food service, and child care, where appropriate.
- ME-E.7 Consider TDM programs with achievable trip reduction goals as partial mitigation for development project traffic and air quality impacts.
- ME-E.8 Monitor implementation of TDM programs to ensure effectiveness.

Bicycling

- ME-F.2 Identify and implement a network of bikeways that are feasible, fundable, and serve bicyclists' needs, especially for travel to employment centers, village centers, schools, commercial districts, transit stations, and institutions.
- a. Develop a bikeway network that is continuous, closes gaps in the existing system, improves safety, and serves important destinations.
 - b. Implement bicycle facilities based on a priority program that considers existing deficiencies, safety, commuting needs, connectivity of routes, and community input.
 - c. Recognize that bicyclists use all City roadways.
 - 1. Design future roadways to accommodate bicycle travel; and
 - 2. Upgrade existing roadways to enhance bicycle travel, where feasible.
- ME-F.4 Provide safe, convenient, and adequate short- and long-term bicycle parking facilities and other bicycle amenities for employment, retail, multifamily housing, schools and colleges, and transit facility uses.
- a. Continue to require bicycle parking in commercial and multiple unit residential zones.
 - b. Provide bicycle facilities and amenities to help reduce the number of vehicle trips.
- ME-F.5 Increase the number of bicycle-transit trips by coordinating with transit agencies to provide safe routes to transit stops and stations, to provide secure bicycle parking facilities, and to accommodate bicycles on transit vehicles.

F.4 Impacts and Mitigation Measures

Significance Criteria

According to the City of San Diego's CEQA Significance Determination Thresholds (City of San Diego, 2011), a significant impact with regard to transportation and circulation could occur if implementation of the CAP results in the following:

- Result in traffic generation in excess of specific community plan allocation;
- Result in an increase in projected traffic which is substantial in relation to the existing traffic load and capacity of the street system;
- Result in the addition of a substantial amount of traffic to a congested freeway segment, interchange, or ramp as shown in the table on the next page;
- Result in an increased demand for off-site parking;
- Result in effects on existing parking;
- Result in a substantial impact upon existing or planned transportation systems;
- Result in substantial alterations to present circulation movements including effects on existing public access to beaches, parks, or other open space areas;
- Result in an increase in traffic hazards for motor vehicles, bicyclists or pedestrians due to a proposed, non-standard design feature (e.g., poor sight distance or driveway onto an access-restricted roadway); or
- Result in a conflict with adopted policies, plans or programs supporting alternative transportation models (e.g., bus turnouts, bicycle racks).

Impact Analysis

Several of the proposed CAP strategies and actions have the potential to affect transportation and circulation, by facilitating or promoting development or redevelopment that could alter existing roadways and traffic circulations patterns. Many of the proposed CAP strategies are aimed at decreasing use of automobiles as a transportation mode and promoting alternative modes, including walking, bicycling, and transit. Among those proposed CAP Actions that could affect transportation, many would only have the potential for an adverse effect during construction, when transportation systems and circulation movements could be temporarily disrupted.

- **Action 1.5 Outdoor Landscaping Ordinance.** This action could result in construction-related effects to transportation due to the construction of new or expansion of existing water recycling facilities and infrastructure, including potential modifications to wastewater treatment plants, installation of recycled water delivery systems, and/or monitoring systems.
- **Action 2.1 Community Choice Aggregation Program.** This action would promote the construction of distributed generation (small-scale renewables) on new and existing buildings, including solar photovoltaics, wind-turbines, and energy storage systems. This action may also result in the construction of large-scale renewable energy generation systems

within or outside of the City to satisfy a large demand for renewable energy. The construction and operation of such facilities could have an effect on transportation.

- **Action 2.2 Municipal Zero Emissions Vehicles.** This action would result in generally minor construction-related effects to transportation within the built environment associated with development of electrical charging and other fueling infrastructure.
- **Action 2.3 Convert Municipal Waste Collection Trucks to Low Emission Fuel.** This action would result in generally minor construction-related effects to transportation within the built environment associated with development of fueling infrastructure.
- **Action 3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas.** This action would facilitate implementation of existing City policies that could result in construction-related effects to transportation due to the development of new and extended mass transit infrastructure and service.
- **Action 3.2 Implement the City's Pedestrian Master Plan in Transit Priority Areas.** This action could result in construction-related effects to transportation due to implementation of the City's Pedestrian Master Plan, including renovations and retrofits of existing sidewalks, cross-walks, and pedestrian trails as well of construction of new pedestrian facilities.
- **Action 3.3 Implement the City's Bicycle Master Plan.** This action would facilitate implementation of the City's Bicycle Master Plan, which would include renovations and retrofits of existing bike lanes and construction of new bike lanes and facilities.
- **Action 3.4 Implement a Traffic Signal Master Plan.** This action would result in generally minor construction-related effects to transportation while traffic signals are reprogrammed.
- **Action 3.5 Implement a Roundabouts Master Plan.** This action would result in generally minor construction-related effects and operational changes to transportation through changes in the streetscape.
- **Action 3.6 Implement Transit-Oriented Development within Transit Priority Areas.** This action would facilitate implementation of the City of Villages strategy, which could result in construction-related and operational effects on the transportation system and circulation.
- **Action 4.1 Divert Solid Waste and Capture Landfill Emissions.** This action would result in construction-related effects to transportation through the construction of new, or expansions of existing waste processing facilities, as well as new or expanded waste collection programs, and may result in long-term operational impacts.
- **Action 4.2 Capture Methane from Wastewater Treatment.** This action could result in construction-related effects to transportation during the construction of new or expanded wastewater treatment facilities, such as anaerobic digesters, and may result in long-term operational impacts.

Issue 1: Would implementation of the CAP result in a substantial impact upon existing or planned transportation systems?

The CAP includes strategies and actions intended to reduce dependence on the automobile and promote and facilitate the use of alternative modes of transportation, including bicycling,

walking, and transit. This shift is anticipated in the General Plan and SANDAG Regional Transportation Plan, and so these CAP actions are consistent with planned transportation systems. Several CAP actions (see the list, above), such as energy efficiency, renewable energy, urban forestry, and others, may result in temporary or limited disruption or alteration of transportation patterns during project construction, but would not substantially alter existing or planned transportation systems. Proposed CAP Action 3.4 Implement a Traffic Signal Master Plan and Action 3.5 Implement a Roundabouts Master Plan would improve traffic flow. These two latter actions would alter the transportation system, but are intended to facilitate traffic flow, and are not expected to result in adverse effects to transportation systems.

Proposed Action 3.2: Implement the City's Pedestrian Master Plan in Transit Priority Areas, and Action 3.3: Implement the City's Bicycle Master Plan, encourage and facilitate implementation of existing City policies, which have already been subjected to environmental review in the Final Program Environmental Impact Report for the City's 2008 General Plan update (General Plan PEIR) and the Bicycle Master Plan Update EIR. The Bicycle Master Plan Update EIR identified a potentially significant impact of plan implementation on traffic and circulation, related to the removal or alteration of vehicle travel lanes along some roadway segments and intersections. Specified mitigation measures would avoid or reduce some impacts, but the Bicycle Master Plan Update EIR concludes that in some instances, significant impacts could be unavoidable.

Proposed CAP Actions 3.1 and 3.6 would facilitate implementation of the General Plan's City of Villages strategy and Mobility Element, which would result in major changes to urban form, including transportation systems, particularly within the Transit Priority Areas. The General Plan PEIR notes the many planned improvements to the transportation and circulation system that would be undertaken through implementation of the City of Villages strategy and Mobility Element, including greater emphasis on alternative transportation modes, will generally lead to better traffic conditions in the City by the year 2030. However, the General Plan PEIR concludes that some projects undertaken pursuant to and consistent with General Plan policies, including the City of Villages strategy and Mobility Element, may adversely affect existing transportation systems. The General Plan PEIR includes a mitigation framework that would be applied to individual projects and would reduce many transportation and circulation impacts of these projects, but the General Plan PEIR concludes that the effectiveness of mitigation measures cannot be ascertained at the program level, and that there is still the potential for significant and unavoidable impacts.

Significance of Impact

As discussed above, the General Plan PEIR identified the potential for significant unavoidable impacts to traffic associated with implementation of the City of Villages strategy. While several of the CAP actions, particularly Action 3.4 Implement a Traffic Signal Master Plan and Action 3.5 Implement a Roundabouts Master Plan would improve traffic flow, they may not be completely effective in reducing or avoiding the impacts to transportation systems associated with the City of Villages strategy.

Other proposed CAP actions would tend to improve the transportation system or would have only temporally and spatially limited effects, which would be considered less than significant. No mitigation is required.

Issue 2: Would implementation of the CAP create substantial alterations to present circulation movements including effects on existing public access points and/or resulting from anticipated changes in transportation modes?

As noted above, implementation of several of the proposed CAP actions would involve construction that could affect present circulation patterns. These effects would be temporary, and can generally be minimized through project planning, scheduling, and temporary signage. Existing regulations require development of a construction traffic management plan for projects that could disrupt traffic flow. With the exception of major projects such as major infill development and redevelopment within TPAs and the construction of major infrastructure facilities (discussed below), the effects of construction-related proposed CAP actions on circulation movements would not be substantial.

Implementation of the City of Villages strategy and General Plan Mobility Element, as facilitated by CAP Actions 3.1 through 3.6, would result in a major change in urban form and a shift to greater use of alternative transportation modes. These changes may result in changes to circulation systems and circulation movements within and around the TPAs, including the potential for the following effects:

- reduced LOS at some intersections and roadways, particularly in TPAs where new development is concentrated;
- increased conflict between transportation modes, such as bicycle vs. motor vehicle and mass transit vs. pedestrian, potentially resulting in adverse impacts to traffic flow and increased safety issues;
- changes in roadway design, including implementation of CAP Action 3.5 Implement a Roundabouts Master Plan. This action would install roundabouts at 15 intersections by 2020 and an additional 20 intersections by 2035. While roundabouts tend to improve traffic flow, they may, in some instances, result in increased safety hazards for pedestrians by eliminating signalized pedestrian crossings and routing traffic closer to crosswalks;
- development of facilities for bicycles, pedestrians, and mass transit that may “borrow” transportation space from existing automobile-oriented roadways, resulting in reduced LOS and increased congestion.

As noted in the discussion of Issue 1, above, The General Plan PEIR notes the many planned improvements to the transportation and circulation system that would be undertaken through implementation of the City of Villages strategy and Mobility Element, including greater emphasis on alternative transportation modes, will generally lead to better traffic conditions in the City by the year 2030. However, the General Plan PEIR concludes that some projects undertaken pursuant to and consistent with General Plan policies, including the City of Villages strategy and Mobility Element, may adversely affect existing transportation systems. The General Plan PEIR includes a mitigation framework that would be applied to individual projects and would reduce

many transportation and circulation impacts of these projects, but the General Plan PEIR concludes that the effectiveness of mitigation measures cannot be ascertained at the program level, and that there is still the potential for significant and unavoidable impacts. Also as discussed under Issue 1, the Bicycle Master Plan Update EIR recognizes the potential for significant unavoidable impacts associated with development of bicycle lanes and bicycle paths, where these would require the removal or alteration of vehicle travel lanes along some roadway segments and intersections.

Proposed CAP Action 1.5 Outdoor Landscaping Ordinance, Action 2.1 Community Choice Aggregation Program, Action 4.1 Divert Solid Waste and Capture Landfill Emissions, and Action 4.2 Capture Methane from Wastewater Treatment all could result in the development of major new or expanded infrastructure facilities, including large-scale renewable energy facilities, recycled water plants, solid waste processing and recovery facilities, and wastewater treatment facilities. These projects could result in short-term construction-related alterations to circulation systems, and could also, in some instances, permanently alter circulation systems, for example, by redeveloping industrial sites that would result in changes to existing roadways. While projects of this type and scale will need to be examined at the project level, project locations will generally be within existing facility footprints or industrial areas, which typically have relatively low traffic density. For large-scale renewable energy facilities proposed to be located within the City, application of Mitigation Measure LU-1 (see Section 3.A, Land Use) which would establish a screening process for ensuring consideration of site adjacencies and compatibilities, would screen for potential impacts to circulation movements.

Proposed CAP Action 2.1 may also encourage or facilitate the development of larger renewable energy systems outside of the City limits. Such development could occur on private or public lands, but would likely be in relatively undeveloped areas with low intensity of use. Thus, there is little potential for construction and operation of these facilities to impact circulation movements, even though they may result in short-term increases in traffic during construction and long term increases in traffic during operation. In any event, it would be the responsibility of the agency with land use authority over the project site to ensure that developments would not adversely affect local circulation movements, which may occur through a CEQA review process conducted by the local land use authority. Therefore, impacts to circulation movements would likely not occur. In any case, traffic impacts of any renewable energy facilities proposed for development outside of the City will be considered in the planning and environmental review process for proposed facilities. Since the exact nature of any impacts cannot be known at this time, effective mitigation cannot be determined at this time.

Proposed CAP Action 4.1 Divert Solid Waste and Capture Landfill Emissions would include changes to existing solid waste collection programs, specifically a change to weekly collection of organic materials and recycling. This may result in an increased number of solid waste collection vehicles entering neighborhoods to collect waste materials. In any given location in the City, this change may result in one or two additional collection vehicles per week. This level of increase may result in minor inconveniences for residents and businesses, but would not constitute a substantial change to circulation movements, and therefore would not be significant. However,

the overall increase in the number of collection vehicles required to implement the more frequent collection service may result in substantial additions of trucks accessing transfer stations and materials recovery facilities and other waste recovery facilities. In some instances, this increase could adversely and substantially affect circulation movements in and around these facilities. However, the CAP contains no specific proposal for new or expanded waste handling facilities. It would, therefore, be speculative to assume that development of such facilities would cause a significant impact on transportation and circulation. Since new and substantially altered solid waste facilities are projects subject to environmental review under CEQA, potential impacts on traffic and circulation would be evaluated at the time that specific projects are proposed.

Significance of Impact

As discussed above, implementation of the City of Villages strategy, including redevelopment within TPAs and the planned shift in transportation modes has the potential to result in significant adverse impacts on traffic and circulation. These impacts have been analyzed in other CEQA documents, including the General Plan PEIR and the Bicycle Master Plan Update EIR. Proposed CAP Action 3.5 Implement a Roundabouts Master Plan, however, has the potential to result in significant safety impacts for pedestrians.

Other proposed CAP actions would not have the potential for significant adverse impacts on traffic and circulation, or would be subject to later, project-specific environmental review. Therefore, impacts of adopting and implementing these actions would be less than significant.

Proposed CAP Action 2.1 Community Choice Aggregation Program could result in the development of large-scale renewable energy facilities that could result in a significant impact to local traffic circulation.

Mitigation, Monitoring, and Reporting

Mitigation Measure TR-1: The Roundabouts Master Plan shall include a monitoring and adaptive management program to evaluate, and if necessary, to correct, pedestrian safety issues at operating roundabouts.

Significance after Mitigation

Mitigation Measure TR-1 would require the City to monitor, and if necessary, provide an adaptive management program for the Roundabouts Master Plan, called for in CAP Action 3.5. However, this measure would only monitor the implementation of the Roundabouts Master Plan, and not mitigate for the potential impact that could result from implementing the Roundabouts Master Plan. Thus, the program level impact related to transportation and circulation is considered significant and unavoidable.

No large-scale renewable energy facilities are proposed as a part of the CAP, and therefore, the potential impacts from the substantial alteration or disruption of existing traffic and circulation patterns from the construction of such facilities is unknown. Because the degree of impact and applicability, feasibility, and success of any mitigation measures relating to traffic circulation cannot be accurately predicted for any large-scale renewable energy project at this time, the

program level impact related to transportation and circulation is considered significant and unavoidable

Issue 3: Would implementation of the CAP conflict with the adopted policies, plans or programs supporting alternative transportation modes (e.g., bus turnouts, trolley extensions, bicycle lanes, bicycle racks, etc.)?

Implementation of Proposed CAP Action 3.1 Implement the General Plan's Mobility Element and the City of Villages Strategy in Transit Priority Areas, Action 3.2 Implement the City of San Diego's Pedestrian Master Plan in Transit Priority Areas, and Action 3.3 Implement the City of San Diego's Bicycle Master Plan, and Action 3.6 Implement Transit-Oriented Development within Transit Priority Areas would increase the number of people walking, biking, and using transit in the City, especially in the Transit Priority Areas.

Implementation of the CAP would benefit bicycle travel through implementation of the City's Bicycle Master Plan. The CAP would also implement the pedestrian improvements outlined in the Pedestrian Master Plan, which would enhance pedestrian facilities and connectivity. Through implementation of the City of Villages strategy and General Plan Mobility Element, the CAP supports transit infrastructure improvements, frequency of service, and increased ridership.

Because these proposed CAP actions would support and facilitate alternative methods of transportation, such as public transit and bicycle and pedestrian facilities, the CAP would be consistent with the intent of City and regional plans that seek to improve local and regional transportation.

Significance of Impact

This impact would be less than significant and no mitigation is required.

G. Utilities

G.1 Introduction

This section analyzes the effects of implementation of the City of San Diego Climate Action Plan (CAP) on wastewater, storm water, solid waste, communications, and energy infrastructure.

G.2 Environmental Setting

Wastewater Management

The Public Utilities Department (PUD) manages the treatment of wastewater from the City of San Diego (City) and 15 other cities and districts in a 450-square mile service area, including: the cities of Chula Vista, Coronado, Del Mar, El Cajon, Imperial Beach, La Mesa, National City, Poway, the Lemon Grove Sanitation District, the Otay Water District, the Padre Dam Municipal Water District, the county of San Diego (including Lakeside/Alpine, Spring Valley, Wintergardens, and East Otay Mesa). The City's wastewater facilities and infrastructure are shown in **Figure 3.G-1**.

Much of the wastewater generated in the region is conveyed to the Point Loma Wastewater Treatment Plant (PLWTP or Point Loma Plant), where an average of 145 million gallons of wastewater are treated each day before being discharged to the Pacific Ocean through two ocean outfalls. A portion of the wastewater is sent to the North City Water Reclamation Plant (NCWRP), which can recycle up to 30 million gallons of water per day before being distributed throughout the northern San Diego region for reuse. Another portion of wastewater is also sent to the South Bay Water Reclamation Plant (SBWRP), which has a treatment capacity of 15 million gallons and relays reclaimed water to areas in the South Bay. Solids from the wastewater treatment plants are conveyed and processed at the Metro Biosolids Center, and then used as soil amendments, landfill, or landfill cover materials.

Currently, the 2.2 million people in PUD's service area generate an average of 160 million gallons of wastewater per day. The treatment plant and two reclamation plants provide a functional treatment system capacity of 285 MGD, sufficient to meet the future needs of the 450-square-mile service area. PUD is currently planning various improvement programs to comply with the National Pollution Discharge Elimination System (NPDES) Permit and maintain the conveyance system to adequately serve an estimated 2.8 million people by 2050 that would generate an average of 220 million gallons of wastewater per day). In addition, the City has an ongoing need to rehabilitate or replace many pipelines, trunk sewers and pump stations to meet the City's wastewater management needs in accordance with state and federal requirements.

Storm Water Management

The City's storm water infrastructure includes more than 39,000 storm drain structures and over 900 miles of storm drain pipes and channels serving approximately 237 square miles of urbanized

development. The City's storm water facilities and infrastructure are shown in **Figure 3.G-2**. The City's storm water pollution prevention efforts are designed to protect and improve the quality of recreational waters and potable water resources, along with beneficial uses of other water resources, to comply with federal, state, and local directives, while fostering a safe and efficient drainage system. The City implements infrastructure improvements and maintenance; water quality monitoring; source identification of pollutants; land use and environmental planning policies and regulations relating to storm water; pollution prevention activities such as education, code enforcement, outreach, public advocacy, and training; and design and development of best management practices.

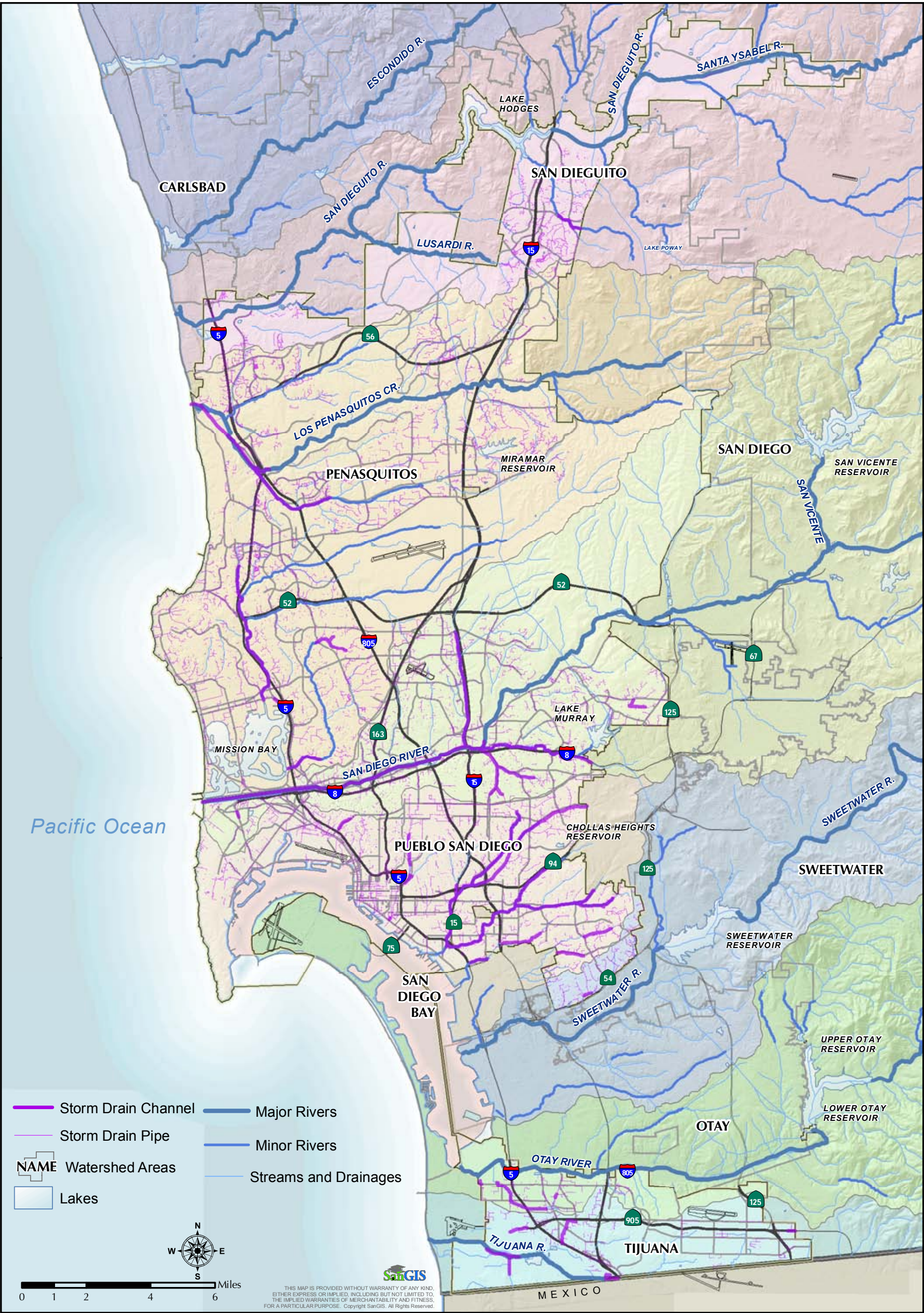
Solid Waste

The City's solid waste facilities are shown in **Figure 3.G-3**. Much of the solid waste that is not diverted is disposed of at the City-operated Miramar Landfill, located in central San Diego on the Marine Corps Air Station. In 2013, approximately 803,000 tons of solid waste was disposed of at Miramar Landfill, accounting for 59 percent of the 1.4 million tons of City waste disposed that year. Most of the remaining waste is sent to the Otay Landfill, located on a County unincorporated area within the City of Chula Vista, or the Sycamore Landfill near the City's border with the City of Santee. Both Sycamore and Otay landfills are owned by Allied Waste, known nationally as Republic Services, and in some areas as Pacific Waste. In 2013 Otay landfill received 334 thousand tons of waste (24 percent) and Sycamore Landfill received 229 thousand tons (17 percent) from the City of San Diego. Operation of each facility requires a Solid Waste Facility Permit, issued by the appropriate Local Enforcement Agency, which reports to the California Department of Resources Recycling and Recovery (CalRecycle). The facilities must comply with all applicable federal, state, and local regulations.

State of California regulations for solid waste (California PRC § 41700 - 41721.5) require that each region have a plan with adequate capacity to manage or dispose of solid waste for at least fifteen years into the future. The solid waste plan for the San Diego County region is contained in the Integrated Waste Management Plan, Countywide Siting Element (2005). The Countywide Integrated Waste Management Plan Five-Year Review Report (2012) estimated that the Miramar Landfill has a closure date of 2022 and the Otay Landfill has a closure date of 2028. Expansion of facilities would be necessary to ensure that the County of San Diego has enough daily permitted capacity to meet solid waste disposal needs until 2028, or the next 14 years; however, the County is lacking sufficient local landfill capacity to meet solid waste disposal needs after 2028 (County of San Diego, 2012).

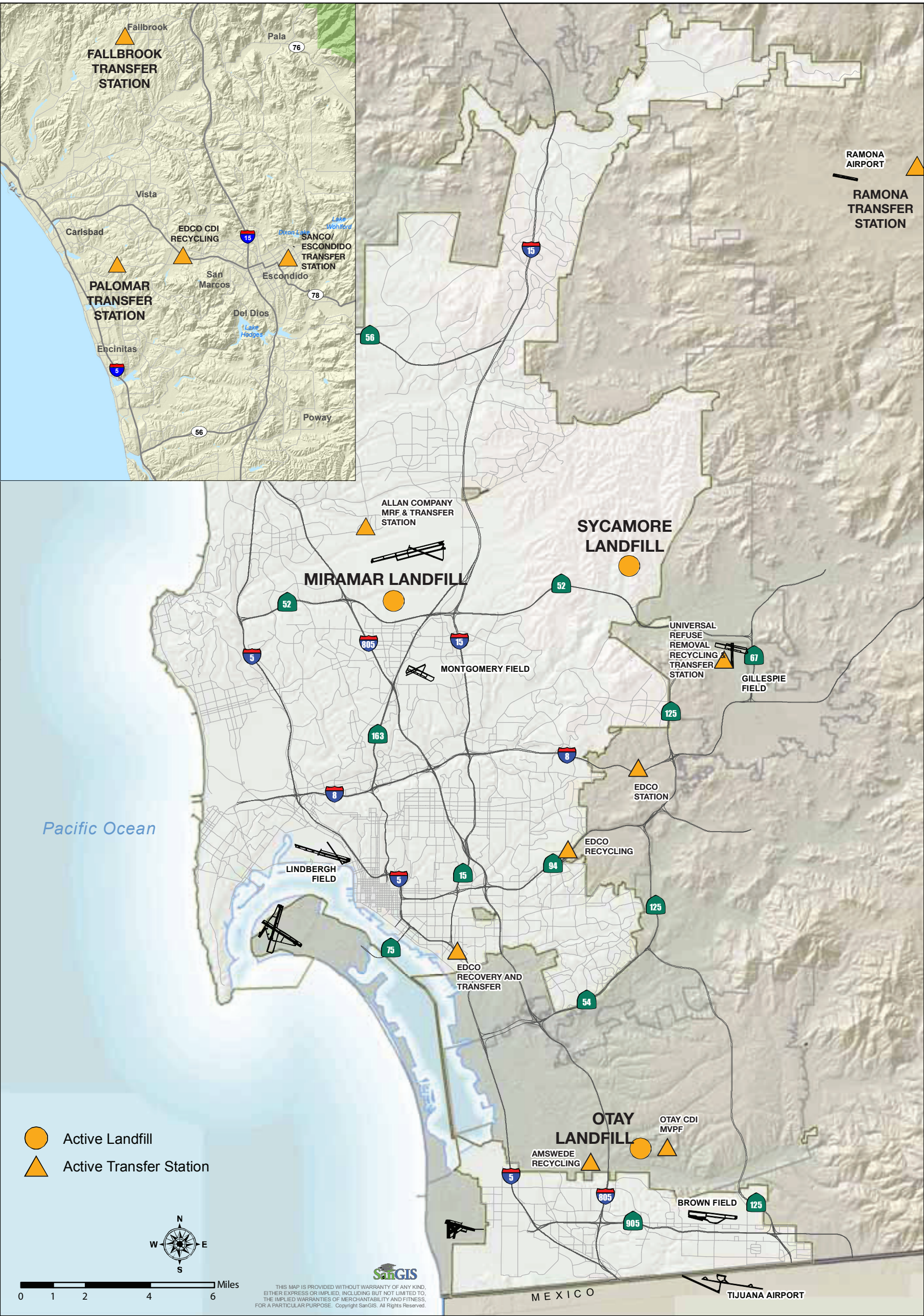
It is the goal of the San Diego Association of Governments' (SANDAG) Comprehensive Resource Management Plan, the Countywide Siting Element, and the County's General Plan to make every effort to extend the life of existing disposal facilities. SANDAG's Regional Comprehensive Plan (RCP) Chapter 4.F provides language regarding "maximizing existing disposal capacity," and aims to achieve a 75 percent diversion rate. The Public Resources Code requires CalRecycle to establish a per capita target for solid waste reduction for each jurisdiction.





SOURCE: City of San Diego Draft General Plan Final PEIR, September 2007

San Diego CAP . 140651
Figure 3.G-2
Storm Water Drainage



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In 2013 San Diego stayed under its target disposal rate of 8.4 pounds per person per day (PPD), with an actual 5.7 PPD rate (CalRecycle, 2015). Additionally, AB 341 sets a statewide 75 percent waste diversion goal and CalRecycle's Strategic Directive 6.1 calls for a 50 percent reduction in organics disposed, both by 2020. Compliance with and implementation of the above state regulations and policy goals could potentially extend the life of existing landfills. On July 13, 2015 the City adopted a Zero Waste Plan, referenced in CAP Action 4.1, which would result in 70 percent waste diversion by 2020, 90 percent waste diversion by 2035 and 100 percent diversion by 2040.

Energy Generation

San Diego Gas & Electric Company (SDG&E) provides energy service to 3.3 million consumers through 1.3 million electric meters and more than 800,000 natural gas meters in San Diego and southern Orange counties. The utility's area spans 4,100 square miles. **Figure 3.G-4, Gas and Electric Substations and Transmission Lines**, identifies some of SDG&E's facilities within the City. ~~SDG&E produces electricity primarily at the Cabrillo (Encina) and South Bay Power Plants, as well as other smaller power plants.~~ SDG&E purchases electricity from the Otay Mesa Energy Center, owned by Calpine, and SDG&E owns and operates the Palomar Energy Center in Escondido, which is then sent to customers through various transmission lines. In 2010, the baseline year of the CAP, SDG&E derived 11 percent of its power from renewable resources including: wind power, solar, small hydroelectric, geothermal, and biomass and waste digestion. SDG&E derived 60 percent of its power from natural gas sources, with nuclear energy providing 16 percent, and coal power providing four percent. The remaining nine percent was derived from untraceable electricity transactions (SDG&E, 2010). Natural gas is imported into the City from sources outside of the region through pipelines to users and in addition to generating electricity is used for heating homes and businesses.

G.3 Regulatory Setting

Federal

International Boundary & Water Commission

The International Boundary & Water Commission (IBWC) is the agency charged with finding solutions to the problem of untreated wastewater flowing into San Diego's South Bay area from Mexico. Organized in 1889, the IBWC has responsibility for establishing the boundary and water treaties between the United States and Mexico and settling differences that may arise out of these treaties. The IBWC is a binational body with a U.S. Section and a Mexican Section, each headed by an engineer-commissioner appointed by their respective Presidents.

Clean Water Act

The Clean Water Act (CWA) is the cornerstone of surface water quality protection in the United States. The statute employs a variety of regulatory and non-regulatory tools to sharply reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff.

Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. Where multiple uses exist, water quality standards must protect the most sensitive use. Water quality standards are typically numeric although narrative criteria based on bio-monitoring methods may be employed where numerical standards cannot be established or where they are needed to supplement numerical standards. The State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Board (RWQCB) are responsible for ensuring implementation and compliance with the provisions of the Federal CWA.

In 1972, the CWA was amended to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with an NPDES permit. The 1987 amendments to the CWA added Section 402(p), which establishes a framework for regulating municipal and industrial storm water discharges, including discharges associated with construction activities, under the NPDES program.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA), enacted in 1976, is the principal federal law in the United States governing the disposal of solid waste and hazardous waste. RCRA amended the Solid Waste Disposal Act of 1965 and set national goals for: protecting human health and the natural environment from the potential hazards of waste disposal; energy conservation and natural resources protection; reducing the amount of waste generated, through source reduction and recycling and ensuring the management of waste in an environmentally sound manner. RCRA is now most widely known for the regulations that set standards for the treatment, storage and disposal of hazardous waste in the United States. The U.S. Environmental Protection Agency (EPA) published waste management regulations, which are codified in Title 40 of the Code of Federal Regulations at parts 239 through 282. Most states have enacted laws and created regulations that are at least as stringent as the federal regulations.

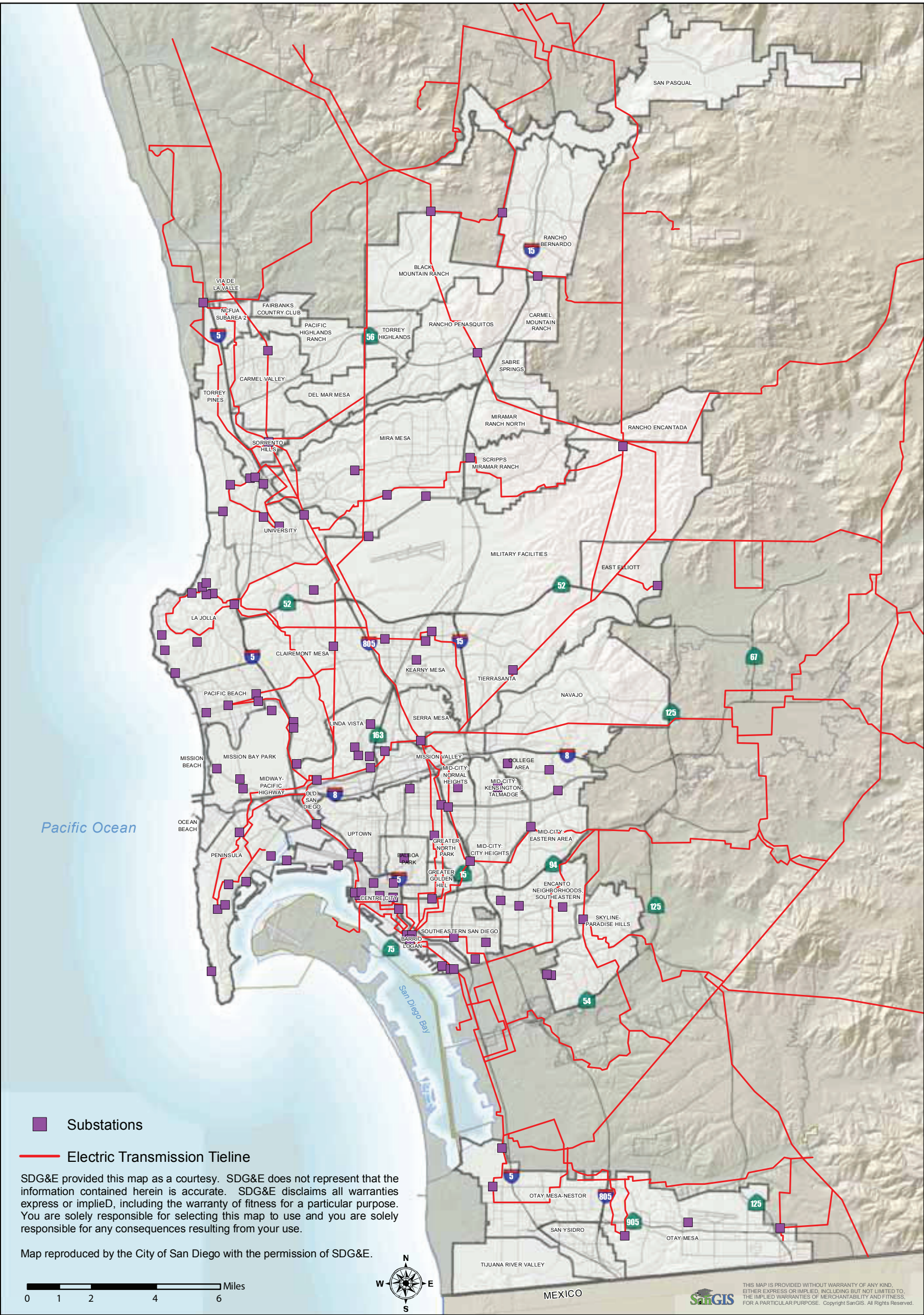
State

California Water Code

The California Water Code, a section of the California Code of Regulations, establishes the governing laws pertaining to all aspects of water management in California.

State Water Resources Control Board

The State Water Resources Control Board (SWRCB) was created by the Legislature in 1967 with the mission of ensuring the highest reasonable quality for waters of the State, while allocating those waters to achieve the optimum balance of beneficial uses. The SWRCB has authority over water allocation by administering and regulating appropriative water right permits and licenses, as per the Water Code, which require all use of water to be “reasonable and beneficial,” which includes municipal and industrial uses, irrigation, hydroelectric generation, and livestock watering.



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In 1970, the Porter-Cologne Water Quality Act created nine Regional Water Quality Control Boards (RWQCBs) that develop and enforce water quality objectives of the State and implementation plans within their region. The Regional Boards oversee various programs that protect surface water and groundwater quality, and enforce the federal NPDES Wastewater Program, and NPDES Storm Water Program. The Regional Boards are also responsible for developing and implementing Total Maximum Daily Loads (TMDLs) for impaired water bodies. The City of San Diego is located within Region 9, which is the San Diego Regional Water Quality Control Board.

Executive Order B-29-15

On April 1, 2015, Governor Brown signed Executive Order B-29-15, which for the first time in state history implements mandatory water reductions in cities and towns across California to reduce water usage by 25 percent. The order also calls on local water agencies to adjust their rate structures to implement conservation pricing, recognized as an effective way to realize water reductions and discourage water waste.

California Storm Water Regulatory Program

Drawing authority from the federal Water Pollution Control Act (Clean Water Act) and the NPDES Permit system, the SWRCB provides storm water policy and regulatory oversight, on behalf of the federal government. Under the program, cities and other jurisdictions that operate large, medium, and small storm water systems, as well as specific industrial sites and construction sites, that disturb more than an acre of land must apply for storm water permits. Construction permits are based on overall risk and may require certain measures to prevent erosion and reduce sediment and other pollutant discharges. Industrial activities are required to use the best technology available to reduce pollutants, and may be required to develop a storm water pollution prevention plan and monitoring plan. Municipal separate storm sewer system (MS4) operators must comply with permits that regulate storm water entering their systems under a two phase system.

California Code of Regulations

In accordance with Title 27 of the California Code of Regulations (CCR), Sections 21600 through 21900, all solid waste disposal sites are jointly regulated under Title 27 CCR, Division 2, Chapters 1 through 8, Section 20005 through 23014; the California RWQCB; and CalRecycle. Solid waste transfer stations and compost sites are regulated under Title 14 CCR, Division 7, Chapters 3 and 4, Sections 17200 through 17870. Transfer stations and compost sites are primarily regulated by CalRecycle. The RWQCB has recently begun to regulate compost sites and has a limited authority regarding transfer stations. The City of San Diego is the Local Enforcement Agency (LEA) for all land within the city's boundaries.

California Public Resources Code

AB 939 modified the Public Resources Code to establish the "California Integrated Waste Management Act (IWMA) of 1989, which defined an integrated waste management hierarchy

starting with the newly established CalRecycle (formerly the California Integrated Waste Management Board) and local agencies, to guide in implementation of, in order of priority as follows: (1) source reduction, (2) recycling and composting, and (3) environmentally safe transformation and land disposal. AB 939 also replaced the various County Solid Waste Management Plans (CoSWMP) with Integrated Waste Management Plans (IWMP) and Siting Elements. AB 939 established statewide waste diversion goals to divert 25 percent of all solid waste from landfills by January 1, 1995 and 50 percent of all solid waste by January 1, 2000 through source reduction, recycling, composting, and, to a limited extent, transformation activities. AB 939 also established a comprehensive statewide system of permitting, inspections, enforcement, and maintenance for solid waste facilities, although the measurement for the waste diversion was changed to disposal-based, per capita limits by SB 1016, and the statewide waste diversion from disposal target was increased to 75 percent by AB 341.

California Global Warming Solutions Act of 2006

The passage of AB 32 requires a sharp reduction of greenhouse gas (GHG) emissions for the State of California to set the stage for its transition to a sustainable, low-carbon future. AB 32 was the first program in the country to take a comprehensive, long-term approach to addressing climate change, and does so in a way that aims to improve the environment and natural resources while maintaining a robust economy. As part of AB 32, landfill methane emissions are a targeted source of GHG reductions, as methane is a powerful GHG with about ten times the global warming potential of carbon dioxide.

California Public Utilities Commission

The California Constitution vests in the California Public Utilities Commission (CPUC), the exclusive power and sole authority to regulate privately owned or investor-owned public utilities such as SDG&E. This exclusive power extends to all aspects of the location, design, construction, maintenance, and operation of public utility facilities. Nevertheless, the CPUC has provisions for regulated utilities to work closely with local governments and give due consideration to their concerns. The state also regulates energy consumption under Title 24 of the California Code of Regulations. The Title 24 Building Energy Efficiency Standards apply to energy consumed for heating, cooling, ventilation, water heating, and lighting in new residential and non-residential structures.

Senate Bill 226

The passage of SB 226 adds section 21080.35 to the Public Resources Code, and creates a new categorical exemption under CEQA for the installation of solar energy systems, including associated equipment, on the roof of an existing building or at an existing parking lot.

Renewable Energy Portfolio Standard

California's Renewables Portfolio Standard (RPS) was established in 2002 under SB 1078, accelerated in 2006 under SB 107 and expanded in 2011 under SB 2. As one of the most ambitious renewable energy standards in the country, the RPS program requires investor-owned

utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020.

Regional

Regional Energy Strategy 2030

The City participates in regional energy planning efforts, and is actively working to achieve the City's long-term goal to pursue energy independence. The Regional Energy Strategy (RES) 2030 was produced to develop a vision for how energy will be produced and consumed in the region. The strategy developed policies and provided measurable targets to achieve the region's sustainable energy vision. At a regional level, the current status toward meeting these targets is reported in the RCP Performance Monitoring Report, most recently release for the years 2012-2013.

Local

Construction and Demolition Diversion Ordinance

The City of San Diego Municipal Code contains the City's Construction and Demolition Debris Ordinance (Sections 66.0601 through 66.0610), which requires an applicant for a building or demolition permit to divert 50 percent, by weight, of the total construction and demolition debris generated.

Recycling Ordinance

The of San Diego Recycling Ordinance was adopted in 2007 and fulfills requirements in Senate Bill 341 which mandated recycling regulations and enhanced recycling requirements for businesses and multifamily residences, as well as increased reporting requirements, for the whole state. The Ordinance requires all residential, commercial, and industrial property owners to procure recycling services in order to increase waste diversion from landfills.

City of San Diego General Plan

The following policies from the City of San Diego General Plan, adopted 2008, are applicable to wastewater, storm water, solid waste, and energy facilities.

Wastewater

PF-F.5 Construct and maintain facilities to accommodate regional growth projections that are consistent with sustainable development policies (see also Conservation Element, Section A).

Waste Management

PF-I.1 Provide efficient and effective waste collection services.

- a. Route City and private fleets to minimize truck trip distances and use fuel-efficient vehicles producing low emissions.

- b. Design or retrofit City and private operation stations consistent with sustainable development policies (see also Conservation Element, Section A).
- c. Encourage waste reduction and recycling with source-separated collection of materials.
- d. Provide space for recycling containers and efficient collection.
- e. Identify additional funding sources for all waste management services.

PF-I.2 Maximize waste reduction and diversion (see also Conservation Element, Policy CE.A.9).

- a. Conveniently locate facilities and informational guidelines to encourage waste reduction, diversion, and recycling practices.
- b. Operate public and private facilities that collect and transport waste and recyclable materials in accordance with the highest environmental standards.
- c. Support resource recovery programs that produce soil additives, mulch, or compost from yard debris and organic waste.
- d. Maximize the separation of recyclable and compostable materials.
- e. Collaborate with public and private entities to support the development of facilities that recycle materials into usable products or that compost organic materials.
- f. Reduce and recycle Construction and Demolition (C&D) debris. Strive for recycling of 100 percent of inert C&D materials and a minimum of 50 percent by weight of all other material.
- g. Use recycled, composted, and post-consumer materials in manufacturing, construction, public facilities and in other identified uses whenever appropriate.
- h. Encourage advance disposal fees to prevent the disposal of materials that cause handling problems or hazards at landfills.
- i. Provide sufficient information on the movement of waste and recyclable materials to meet regulatory requirements at public and private transfer stations and materials recovery facilities to allow adequate planning.
- j. Reduce subsidies to disposal and encourage incentives for waste diversion.
- k. Promote manufacturer and retailer responsibility to divert harmful, reusable, and recyclable products upon expiration from the waste stream.
- l. Encourage the private sector to build a mixed construction and demolition waste materials recycling facility.
- m. Expand and stabilize the economic base for recycling in the local and regional economy by encouraging and purchasing products made from recycled materials.
- n. Continuously assess new technologies for recycling, composting, cogeneration, and disposal to maximize efficient use of City resources and environmental protection.

- PF-I.3 Provide environmentally sound waste disposal facilities and alternatives.
- a. Design and operate disposal facilities located within the City, or that serve as a destination for City waste, to meet or exceed the highest applicable environmental standards.
 - b. Identify and investigate alternatives to standard disposal practices as fiscally- and environmentally sound technologies become available.
 - c. Ensure efficient, environmentally sound refuse and recyclable materials collection and handling through appropriate infrastructure, alternative fuel use, trip coordination, and other alternatives.
 - d. Ensure environmentally and economically sound disposal options for materials that cannot be effectively reduced, reused, recycled, or composted.
 - e. Plan for disposal needs considering factors such as trip distance and environmentally sound disposal capacity.
 - f. Cooperate on a regional basis with local governments, state agencies, and private solid waste companies to find the best practicable, environmentally safe, and equitable solutions to solid and hazardous waste management.
 - g. Maximize environmental benefit in landfill-based waste diversion and effective load check programs by ensuring that recyclable or hazardous materials do not end up in the landfill.
 - h. Use closed and inactive landfill sites for public benefits, such as provision of energy from waste generated methane, reclamation of wildlife habitat upon proper remediation or other land uses such as parks determined to be appropriate.
- PF-I.4 Promote litter prevention efforts and practices.
- a. Provide conveniently located public litter containers on public streets and in large public venues and strategically located recyclable materials containers.
 - b. Encourage partnerships and collaborative efforts to sponsor and coordinate neighborhood pride/cleanup events.
 - c. Promote anti-litter education campaign and encourage point of purchase and other funding options to support education and cleanup efforts.

Urban Runoff Management

- CE-E.2c Reduce the amount of impervious surfaces through selection of materials, site planning, and street design where possible.
- CE-E.2d Increase the use of vegetation in drainage design
- CE-E.6 Continue to encourage "Pollution Control" measures to promote the proper collection and disposal of pollutants at the source, rather than allowing them to enter the storm drain system.
- a. Promote the provision of used oil recycling and/or hazardous waste recycling facilities and drop-off locations.

- b. Review plans for new development and redevelopment for connections to the storm drain system.
- c. Follow up on complaints of illegal discharges and accidental spills to storm drains, waterways, and canyons.

Sustainable Energy

- CE-I.1 Maintain a centralized Energy Conservation and Management Program and Comprehensive Plan for all City operations.
- CE-I.2 Coordinate City energy planning programs with federal, state and regional agencies. Maximize energy efficiency, use of clean renewable resources, and demand response.
- CE-I.3 Pursue state and federal funding opportunities for research and development of alternative and renewable energy sources.
- CE-I.4 Maintain and promote water conservation and waste diversion programs to conserve energy.
- CE-I.5 Support the installation of photovoltaic panels, and other forms of renewable energy production.
 - a. Seek funding to incorporate renewable energy alternatives in public buildings.
 - b. Promote the use and installation of renewable energy alternatives in new and existing development.
- CE-I.6 Develop emergency contingency plans, in cooperation with other local agencies and regional suppliers, to assure essential energy supplies and reduce non-essential consumption during periods of energy shortage.
- CE-I.7 Pursue investments in energy efficiency and direct sustained efforts towards eliminating inefficient energy use.
- CE-I.8 Improve fuel -efficiency to reduce consumption of fossil fuels.
- CE-I.9 Implement local and regional transportation policies that improve mobility and increase energy efficiency and conservation.
- CE-I.10 Use renewable energy sources to generate energy to the extent feasible.
- CE-I.11 Collaborate with others to develop incentives to increase the use of renewable energy sources or reduce use of non-renewable energy sources.
- CE-I.12 Use small, decentralized, aesthetically-designed, and appropriately-sited energy efficient power generation facilities to the extent feasible.
- CE-I.13 Promote and conduct energy conservation education.

G.4 Impacts and Mitigation Measures

Significance Criteria

According to the City of San Diego's CEQA Significance Determination Thresholds, an impact related to public utilities, including natural gas, water, sewer, solid waste disposal, or communication systems, would be considered significant if implementation of the CAP would:

- Result in the need for new systems, or requires substantial alterations to existing utilities, the construction of which would create physical impacts;
- Result in the use of excessive amounts of fuel or energy (e.g. natural gas);
- Result in the use of excessive amounts of power;
- Result in use of excessive amounts of water; or
- Result in landscaping which is predominantly non-drought resistant vegetation.

Impact Analysis

As indicated in Table 2-5 in Chapter 2, Project Description, the proposed CAP actions that could have an impact on public utilities include the following:

- **Action 1.5 Outdoor Landscaping Ordinance.** Supporting measures and steps that support implementation of this action could result in the construction of new or expansion of existing water recycling facilities and infrastructure, including potential modifications to wastewater treatment plants, installation of recycled water delivery systems, monitoring systems, etc. This could lead to increased recycled water supply and delivery systems.
- **Action 2.1 Community Choice Aggregation Program or Similar Program.** Supporting measures and steps that support implementation of this action could result in installation of small scale and large scale renewable energy generation, transmission, and storage systems. These could result in the extension, expansion, rerouting, and construction of new public and private utility needs.
- **Action 3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas, and Action 3.6 Implement Transit-Oriented Development within Transit Priority Areas.** These actions would facilitate the implementation of the City of Villages strategy and the shift to greater emphasis on mass transit and other modes of transportation. These actions could, therefore, result in new construction and other physical changes that could result in new or modifications to the existing infrastructure systems to support a more concentrated urban landscape.
- **Action 3.6 Implement the City's Pedestrian Master Plan in Transit Priority Areas, Action 3.3 Implement the City's Bicycle Master Plan, and Action 3.5 Implement a Roundabouts Master Plan.** These actions would generally result in minor changes to improve or add pedestrian and bicycle facilities, primarily in and around the TPAs, and would result in the installation of up to 24 roundabouts to facilitate traffic flow. These changes could result in replacement or relocation of existing public utility infrastructure.
- **Action 4.1 Divert Solid Waste and Capture Landfill Emissions.** These actions could lead to the development of new or expanded waste diversion and gas capture/use facilities.

Development of such facilities may result in the construction of new or expansion of existing natural gas, communication systems, water, sewer, and solid waste disposal systems.

- **Action 4.2 Capture Methane from Wastewater Treatment.** Associated actions could result in new or expanded wastewater treatment facilities, such as anaerobic digesters. These could result in the extension, expansion, rerouting, and construction of new public utility infrastructure.

Impacts and Mitigation Measures

Issue 1: Would implementation of the CAP result in a need for new utility systems, or require substantial alterations to existing infrastructure?

Several of the CAP strategies include actions that when implemented will result in physical changes to the environment. Some of these changes may result in a need for new utility systems or require modifications or retrofits to existing infrastructure.

Action 1.5 would involve implementation of the Outdoor Landscaping Ordinance, which would result in more efficient landscape irrigation systems and encourage the installation of landscaping that uses less water. This action could result in the construction of new or expansion of existing water recycling facilities and infrastructure, and installation of recycled water delivery systems, monitoring systems, etc. The use of more efficient landscape irrigation systems is consistent with the City's Recycled Water Study and Recycled Water Master Plan, which include long-term goals to optimize water reuse, including increased recycled water irrigation use.

Action 1.5 would also reduce outdoor water use, and would in turn reduce runoff from landscape irrigation. Implementation of the CAP would result in alterations to existing buildings and infrastructure, in the form of building retrofits as well as improvements to the transportation and utility systems; however, such changes are not expected to substantially increase impervious surfaces to the extent that it would require the construction of new storm water infrastructure. Such improvements would be subject to existing City policies and regulations and General Plan policies and programs applicable to storm water, including the Municipal Storm Water NPDES Permit. Because the CAP would reduce, rather than increase, storm water runoff, it is not anticipated that it would cause new or more severe impacts related to storm water.

As described in the CAP, the City's GHG inventory shows that energy consumption accounts for 40 percent of the emissions generated by the City. These emissions are the result of energy generation methods that emit high levels of GHGs, which include combustion of natural gas and coal. Action 2.1 of the CAP establishes a goal for the City to supply 100 percent of its electricity needs with renewable sources by 2035 through a community choice aggregation program or similar program, which would leverage the aggregated purchasing power of individual customers to purchase renewable energy on a large scale, and through encouraging local solar photovoltaic (PV) and solar water heater installations. Small scale facilities, such as rooftop photovoltaic panels, generally do not require substantial alterations to existing public utility infrastructure and therefore, would have less-than-significant impacts to public utilities. Additionally, this strategy

is intended to reduce the demand on utility systems, thereby reducing the energy used to operate such facilities and the emissions associated with generating that energy.

Large scale renewable energy projects, such as solar and wind farms, could involve new, large or extensive facilities that could result in a need for new utility systems, or require substantial alterations to existing infrastructure. New or expanded facilities may include or supply power generation and transmission facilities, which may have both construction effects and operational effects, including the disruption of services due to replacement or relocation of existing facilities. These impacts could be significant.

Proposed CAP Action 3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas, and Action 3.6 Implement Transit-Oriented Development within Transit Priority Areas strategy are intended to facilitate implementation of major changes to the urban landscape already planned for in the General Plan, Sustainable Communities Strategy, and other planning documents. These changes would result in the development of more dense, built-up, and transit and alternative transportation-oriented development, particularly within the TPAs. The City of Villages strategy would reduce per capita demand for services, but could still result in localized effects (e.g., installation of new transmission or conveyance systems) as well as new or upgraded facilities. Because future development of properties within the City of Villages planning areas would likely increase demand, there may be a need to increase sizing of existing pipelines and mains for both wastewater and water, which could adversely affect existing utilities, as discussed more fully in the General Plan EIR.

The CAP does not propose any site-specific projects or allow for development that would result in a direct increase in demand for public utilities. The strategies in the CAP would generally support the General Plan Mitigation Framework by reducing energy and water demand, and extending the useful life of landfills. However, improvements to existing utilities systems and the development of new systems are anticipated to be developed to meet certain goals within the CAP that could have significant effects.

Proposed CAP Actions 3.2 and 3.3 would make generally minor changes to improve or add pedestrian and bicycle facilities, primarily in and around the TPAs, and would result in the installation of up to 24 roundabouts to facilitate traffic flow. These changes could result in replacement or relocation of existing public utility infrastructure. These impacts would be temporary in nature and are not expected to result in substantial alterations to existing infrastructure.

Action 4.1 would result in alterations to existing landfills to increase the methane capture rate to 80 percent in 2020 and 90 percent by 2035. Improvements to existing gas-capture equipment would not require the expansion of existing landfill facilities, and would not modify the remaining capacity of existing landfills. However, such improvements could result in construction activities within the existing footprint of affected landfill facilities that could generate construction waste. Action 4.1 also establishes a goal to reach zero waste disposal (90 percent diversion) by 2040. Such measures include a change to the weekly collection of recycling and green waste and addition of food scraps. This could result in new or expanded

organics processing and recycling processing. To achieve 90 percent waste diversion, existing recycling and transfer facilities may need to be expanded, and new waste handling facilities may need to be constructed. Associated construction and operational impacts of these facilities could be significant.

Any solid waste generated during construction-related activities associated with implementation of the CAP would be recycled or disposed of in accordance with all applicable local, state, and federal regulations. Demolition or construction materials that can be recycled or reused would comply with the City's Construction and Demolition Debris Ordinance. Any new facilities or expansions to existing facilities would be subject to existing City policies and regulations and General Plan policies and programs applicable to solid waste facilities.

Implementation of Strategy 4.2 in the CAP would result in alterations to existing wastewater facilities to increase the methane capture rate from 71 percent in 2010 to 98 percent by 2035. Such improvements could result in construction activities within the existing footprint of affected wastewater facilities, which could have short-term effects related to air quality, noise, traffic, GHG emissions, and hydrology. Such projects would be subject to existing City policies and regulations and General Plan policies and programs applicable to wastewater.

Significance of Impact

As discussed above, implementation of the City of Villages strategy, as facilitated by the CAP, has the potential to result in significant impacts to utility systems. However, because the City of Villages strategy is already City policy, and because it was already the subject of environmental review (the General Plan PEIR), potential impacts associated with implementation of the City of Villages strategy are not considered impacts of the CAP.

Also as noted above, development of large-scale renewable energy facilities, water recycling facilities, and waste processing facilities could potentially require new or expanded utility systems. The CAP contains no specific plans for developing such facilities, but only anticipates that they may be developed in the future, and such impacts would be site- and project-specific. For example, a large-scale renewable energy generation facility could be proposed for a site already adequately served with electrical transmission lines, water, sewer, communications, and stormwater systems, and so would not have a significant impact on utility systems; while another proposed facility may not be so well served, and may therefore require the expansion or extension of utility systems. The City's process for the evaluation of discretionary projects includes environmental review and documentation pursuant to CEQA as well as an analysis of those projects' consistency with the goals, policies, and recommendations of the General Plan. As future environmental analysis would be required for specific public utilities projects necessary to implement the CAP, impacts associated with construction and operation of new or substantially altered utilities systems would be addressed at the project-level. Therefore, such impacts would be examined as specific projects are proposed, and for the purposes of this PEIR, impacts of the CAP on utility systems are less than significant.

Mitigation Framework

No mitigation is required.

H. Water Supply

H.1 Introduction

This section analyzes potential impacts on water supply that could result from implementation of the City of San Diego (City) Climate Action Plan (CAP).

H.2 Environmental Setting

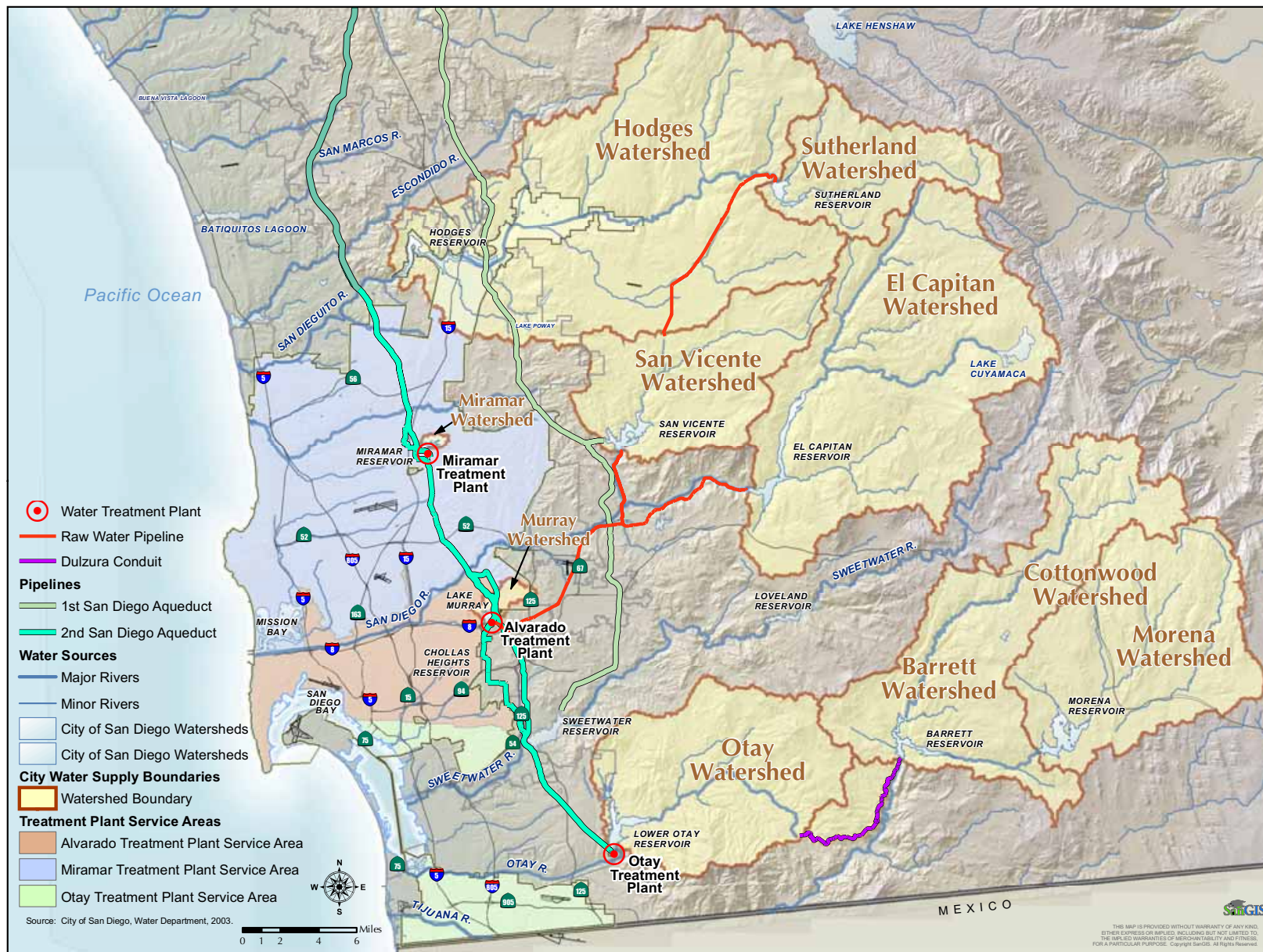
Regional Water Supply

The climate in the San Diego region is a semiarid coastal desert with little rainfall (averaging ten inches annually); therefore, the City relies heavily on imported water to meet its demands. The City of San Diego purchases water from the San Diego County Water Authority (Water Authority or SDCWA), a wholesale water agency that provides water to 24 member agencies. SDCWA purchases much of its water from the Metropolitan Water District of Southern California (MWD), which is a cooperative of 26 cities and water agencies that serve 19 million people across six counties in Southern California in a 5,200 square mile service area. MWD has stated that it “would provide the Water Authority with adequate supplemental imported supplies in normal years and a single dry-year. In multiple dry years, under its projected preferential right formula, the Water Authority could experience shortages (SDCWA, 2011).”

MWD imports water from Northern California via the State Water Project (SWP) and the Colorado River. Water from the SWP is captured in reservoirs north of Sacramento before its released through natural rivers and streams into the Sacramento-San Joaquin Delta, where it travels down the 444-mile long California Aqueduct which is operated by the Department of Water Resources (DWR). Water from the Colorado River travels from Lake Havasu on the California-Arizona border down the 242 mile long Colorado River Aqueduct where it joins the imported water from the SWP at a MWD facility in Riverside County before being transferred to local water treatment plans. The City’s potable water system is shown in **Figure 3.H-1**.

SDCWA Water Supply Diversification

In the past, the City relied on water from MWD for 95 percent of its supply. During years of drought this made the City extremely vulnerable to water supply shortages, such as in 1991 when a drought forced MWD to cut its deliveries to San Diego by 30 percent. As a result, SDCWA has implemented a strategy to aggressively diversify its water supply portfolio through the introduction of new local and imported water supplies, so that by 2014 MWD deliveries accounted for around 49 percent of the total supply with new sources and conservation efforts accounting for the remaining 51 percent. **Table 3.H-1** shows the change in SDCWA’s water supply portfolio from historic supplies in 1991 to present day and future supplies in 2020.



SOURCE: City of San Diego Draft General Plan Final PEIR, September 2007

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Figure 3.H-1
Surface and Recycled Water System

**TABLE 3.H-1
SDCWA WATER SUPPLY DIVERSIFICATION**

Source	1991		2014		2020	
	TAF	Percent	TAF	Percent	TAF	Percent
Metropolitan Water District	550	95	326	49	231	30
Imperial Irrigation District Transfer	-	-	100	15	190	24
All American and Coachella Canal Lining	-	-	80	12	80	10
Conservation Efforts	-	-	73	11	103	13
Local Surface Water	28	5	40	6	48	6
Recycled Water	-	-	29	4	44	6
Groundwater	-	-	19	3	27	4
Seawater Desalination	-	-	-	-	56	7
Total	578	100	667	100	779	100

NOTES: TAF represents one thousand acre feet per year, or 325,851 thousand gallons.

SOURCE: SDCWA, 2015.

SDCWA secured new imported water supplies through a long-term (45-75 year) water conservation and transfer agreement with the Imperial Irrigation District, which provided approximately 100,000 acre-feet of water from the Colorado River in 2014 and will double by 2021. SDCWA has a separate 110-year agreement to receive approximately 80,000 acre-feet of water from the Colorado River by lining parts of the Coachella and All-American canals.

SDCWA is also in the final stages of executing a \$3.1 billion Capital Improvements Program that involves 50 different projects, including new reservoirs, pipelines, pumping stations, a new regional water treatment facility, and a project to raise the San Vicente Dam to allow for additional local storage. Other strategies involve collaboration with SDCWA's 24 local member retail agencies, and include: promoting water conservation through water use efficiency programs, and the introduction of supplies from groundwater, recycled water, and seawater desalination. Additional information about SDCWA water supply diversification projects is provided in SDWCA's 2010 Urban Water Management Plan (UWMP).

City of San Diego Water Supply

The City of San Diego water system serves more than 1.3 million people populating approximately 340 square miles. The City also conveys and sells water to the City of Del Mar, Santa Fe and San Dieguito Irrigation Districts, and California American Water Company (Cal-Am), which, in turn, serves the Cities of Coronado and Imperial Beach and portions of south San Diego. The City has agreements to sell surplus water to Otay Water District and exchange water to Ramona Municipal Water District. The City maintains several emergency connections to and from neighboring water agencies, including Santa Fe Irrigation District, Poway Municipal Water District, Otay Water District, Cal-Am, and Sweetwater Authority.

The City has nine local surface water reservoirs with more than 408,000 AF of capacity, which are connected directly or indirectly to three water treatment plants that include the Miramar Water Treatment Plant (WTP), the Alvarado WTP, and the Otay WTP and have a combined total treated capacity of 294 MGD. The department maintains and operates 32 treated water storage facilities, and a series of distribution lines to serve San Diego residents. Along with the potable water supply, the City has two water reclamation plants to treat wastewater to a level that is approved for irrigation, manufacturing and other non-drinking, or non-potable purposes. The Public Utilities Department (PUD) maintains and operates the recycled water distribution system.

The geography of San Diego provides limited natural local supplies in the form of groundwater, and in order to be usable, much of the available groundwater must undergo desalination to be potable. While the PUD has potential groundwater supply options estimated at 6,000 – 20,000 AFY, the current cost of utilizing the supply under current technology is infeasible. The San Pasqual/Lake Hodges groundwater basin is currently used for irrigation by some of the leaseholds.

The City currently purchases most of its water from the SDCWA, averaging between 100,000 and 228,000 acre-feet (AF) of water per year for the last 20 years. Other sources of water for the City include local surface water, groundwater, and recycled water sources. **Table 3.H-2** shows the City's projected water supply through 2035.

**TABLE 3.H-2
CITY OF SAN DIEGO WATER SUPPLY**

Source	2015		2020		2035	
	AF	Percent	AF	Percent	AF	Percent
San Diego County Water Authority	201,719	83.9	221,458	85.1	260,107	87.0
Supplier Produced Surface Water	29,000	12.1	29,000	11.1	29,000	9.7
Supplier Produced Groundwater	500	0.2	500	0.2	500	0.2
Recycled Water	9,253	3.8	9,253	3.6	9,253	3.1
Total	240,472	100	260,211	100	298,860	100

NOTES: AF represents one acre-foot or 325,851 gallons.

SOURCE: City of San Diego, 2011.

To improve water supply reliability the City continues to pursue water recycling and the expansion of its conservation programs. The City relies upon SDCWA and MWD to develop additional sources of water and storage for increased reliability. In the event of short-term interruptions in water supply, the City has developed a water shortage contingency plan that outlines actions that would be taken to reduce water consumption throughout its service area.

Water Conservation

The City's Water Conservation Program was adopted by the City Council in 1985 to reduce San Diego's dependency upon imported water. The program now accounts for over 30 million gallons per day (mgd) of potable water savings. Water conservation goals in the City's 2005

Urban Water Management Plan, the City of San Diego Long-Range Water Resources Plan (2002 – 2030) and the Strategic Plan for Water Supply (1997 – 2015) were established at: 32,000 AF by 2010; 36,000 AF by 2020; and 46,000 AF by 2030. The 2010 goal was achieved; however, in accordance with Senate Bill x7-7 the City's water savings goals for 2020 are now 40,400 AF per year to meet the required 20 percent reduction per capita set by the State's 20x2020 Water Conservation Plan. In response to the 20x2020 Water Conservation Plan, the City's Water Conservation Program includes water demand reduction through promoting or providing incentives for the installation of hardware that provides permanent water savings, and by providing services and information to help San Diegans make better decisions about water use. The program includes initiatives such as the rain barrel rebates, grass replacement and micro-irrigation rebates, free mulch program, commercial landscape survey program, residential interior/exterior survey program, and a variety of public outreach and education efforts including free California-friendly landscape classes. The City also has a plumbing retrofit upon re-sale ordinance for all buildings to have water-conserving plumbing fixtures in place prior to change of ownership.

H.3 Regulatory Setting

Federal

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA), administered by the United States Environmental Protection Agency (EPA) in coordination with the California Department of Public Health (CDPH), is the main federal law that ensures the quality of Americans' drinking water. Under SDWA, EPA sets standards for drinking water quality and oversees the states, localities, and water suppliers who implement those standards. In 1996, Congress amended the Safe Drinking Water Act to emphasize sound science and risk-based standard setting, small water supply system flexibility and technical assistance, community-empowered source water assessment and protection, public right-to-know, and water system infrastructure assistance through a multi-billion-dollar State revolving loan fund.

State

California Water Code

The California Water Code, a section of the California Code of Regulations, establishes the governing laws pertaining to all aspects of water management in California.

State Water Resources Control Board

As discussed in Section 3.G Utilities, the State Water Resources Control Board (the State Water Board) was created by the Legislature in 1967 with the mission of ensuring the highest reasonable quality for waters of the state, while allocating those waters to achieve the optimum balance of beneficial uses. The Water Board has authority over water allocation by administering and regulating appropriative water right permits and licenses, as per the Water Code, which require all

use of water to be “reasonable and beneficial,” which includes municipal and industrial uses, irrigation, hydroelectric generation, and livestock watering.

In 1970, the Porter-Cologne Water Quality Act created nine Regional Water Quality Control Boards (Regional Boards) that develop and enforce water quality objectives of the State and implementation plans within their region. The Regional Boards oversee various programs, which protect surface water and groundwater quality, and enforce the federal National Pollutant Discharge Elimination System (NPDES) Wastewater Program, and NPDES Stormwater Program. The Regional Boards are also responsible for developing and implementing Total Maximum Daily Loads (TMDL) for impaired water bodies. The City of San Diego is located within Region 9 and is served by the San Diego Regional Water Quality Control Board.

Urban Water Management Planning Act

In 1983, the California Legislature enacted the Urban Water Management Planning Act (Water Code Section 10610 to 10656). The Act states that every urban water supplier that provides water to 3,000 or more customers, or that provides over 3,000 acre-feet annually, should make every effort to ensure the appropriate level of reliability in its water service is sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry years. The Act requires that urban water suppliers adopt and submit an urban water management plan at least once every five years to the Department of Water Resources. Non-compliant urban water suppliers are ineligible to receive funding pursuant to Division 24 (commencing with Section 78500) or Division 26 (commencing with Section 79000), or receive drought assistance from the State until the UWMP is submitted pursuant to the Urban Water Management Planning Act.

Senate Bills (SB) 610 and SB 221

SB 610 and SB 221 amended State law, effective January 1, 2002, to improve the link between the information on water supply availability and certain land use decisions made by cities and counties. Both statutes require detailed information regarding water availability to be provided to the city and county decision-makers prior to approval of specified large (greater than 500 dwelling units) development projects. Both statutes also require this detailed information to be included in the administrative record that serves as the evidentiary basis for an approval action by the city or county on such projects. Under SB 610, water assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects as defined in Water Code 10912 subject to the California Environmental Quality Act (CEQA).¹ Under SB 221, approval by a city or county of certain residential subdivisions requires an affirmative written verification of sufficient water supply.

¹ SB 610 water supply assessments are not required for General Plan Updates because they are not “water demand” projects as defined by SB 610. See CEQA Guidelines Section 15155(a)(1).

Senate Bill 7 of the Seventh Extraordinary Session of 2009

The State Legislature passed Senate Bill 7 as part of the Seventh Extraordinary Session (SBX7-7) on November 10, 2009, which became effective February 3, 2010. SBX7-7 was the water conservation component to the Delta legislation package, and seeks to achieve a 20 percent statewide reduction in urban per capita water use in California by December 31, 2020. The law requires each urban retail water supplier to develop urban water use targets to help meet the 20 percent goal by 2020, and an interim water reduction target by 2015.

Urban retail water suppliers must include in their 2010 UWMPs: (1) baseline daily per capita water use; (2) urban water use target; (3) interim water use target; (4) compliance daily per capita water use, including technical bases and supporting data for those determinations. An urban retail water supplier may update its 2020 urban water use target in its 2015 urban water management plan (Water Code Section 10608.20). Wholesale water suppliers must include in their 2010 Plans an assessment of their present and proposed future measures, programs and policies to help retail agencies achieve their water use reduction targets. (Water Code Section 10608.36).

Title 22 of California Code of Regulations

Title 22 regulates the use of reclaimed wastewater. In most cases, only disinfected tertiary water may be used on food crops where the recycled water would come into contact with the edible portion of the crop. Disinfected secondary treatment may be used for food crops where the edible portion is produced above ground and would not come into contact with the secondary effluent. Lesser levels of treatment are required for other types of crops, such as orchards, vineyards, and fiber crops. Standards are also prescribed for the use of treated wastewater for irrigation of parks, playgrounds, landscaping and other non-agricultural irrigation. Regulation of reclaimed water is governed by the nine RWQCBs and the CDPH.

Groundwater Management Act (AB 3030)

Passed in 1992, AB 3030 (California Water Code Sections 10750-10756) provides a systematic procedure for an existing local agency to develop a groundwater management plan. This section of the code provides such an agency with the powers of a water replenishment district to raise revenue to pay for facilities to manage the groundwater basin (extraction, recharge, conveyance, quality).

Sustainable Groundwater Management Act (2014)

On Sept. 16, 2014, the Sustainable Groundwater Management Act of 2014 (SGMA) was passed. The SGMA provides a framework for sustainable management of groundwater supplies by local authorities, with a limited role for State intervention only if necessary to protect the resource.

The act requires the formation of local groundwater sustainability agencies (GSAs) that must assess conditions in their local water basins and adopt locally-based management plans. The act provides substantial time – 20 years – for GSAs to implement plans and achieve long-term groundwater sustainability. It protects existing surface water and groundwater rights and does not impact current drought response measures.

Executive Order B-29-15

On April 1, 2015, Governor Jerry Brown issued Executive Order B-29-15 to the State Water Resources Control Board to impose restrictions to achieve a statewide 25 percent reduction in potable urban water usage through February 28, 2016. These restrictions require that water suppliers to California's cities and towns reduce usage as compared to the amount used in 2013. The order also includes additional orders including, but not limited to:

- Replace 50 million square feet of lawns throughout the state with drought tolerant landscaping in partnership with local governments;
- Direct the creation of a temporary, statewide consumer rebate program to replace old appliances with more water and energy efficient models;
- Require campuses, golf courses, cemeteries and other large landscapes to make significant cuts in water use; and
- Prohibit new homes and developments from irrigating with potable water unless water-efficient drip irrigation systems are used, and ban watering of ornamental grass on public street medians.

Regional

San Diego Integrated Regional Water Management Plan

The San Diego Integrated Water Management Plan (IRWMP) was created in response to California's IRWM Planning Act of 2002 (Division 6, Part 2.2 of the Water Code §10530 et seq.), amended in 2008. The first-ever San Diego IRWM Plan was completed in 2007, and submitted to DWR, to coordinate water resource management efforts and to enable the San Diego Region to pursue grant and other funding opportunities. The City, SDCWA, and the County of San Diego formed the Regional Water Management Group (RWMG) in 2005, which has funded, guided and managed the development of the IRWM Program to date. The Regional Advisory Committee (RAC) was formed in December 2006 to assist in the completion of San Diego's 2007 IRWM Plan and prioritization of projects both within the Plan and for future funding application(s) as they arise. An updated San Diego Integrated Regional Water Management Plan was adopted in 2013.

San Diego County Water Authority 2010 Urban Water Management Plan

The San Diego County Water Authority's (Water Authority) 2010 Urban Water Management Plan (UWMP) was prepared in accordance and compliance with the Urban Water Management Planning Act (Act) (Water Code §10610 through 10656) and includes the conservation measures, programs and policies required by Water Code §10608.36. The plan serves as the Water Authority's long-term planning document to ensure a reliable water supply for the region. The 2010 Plan includes: the Water Authority's climate change mitigation and adaptation strategies; measures, programs, and policies to achieve per capita water use targets as required by Water Code § 10608.36 at both the retail agency level and the Water Authority as a wholesale provider; a discussion on the Water Authority's Integrated Regional Water Management Plan; the Water Authority's Scenario Planning process to deal with future uncertainties in long-range water planning; and details on the 2007-2011 water shortage.

Local

City of San Diego 2010 Urban Water Management Plan

The City's 2010 Urban Water Management Plan (UWMP) describes historic and projected water supply and demand scenarios, water supply reliability, water usage trends, current and planned facilities to support demand, current and planned demand management programs, water shortage contingency plans, water recycling efforts, groundwater use, and alternative sources of water (desalting, water transfers, groundwater storage) that the City is considering. The UWMP describes the City's water conservation efforts, which are an important component of the City's overall water supply strategy and the City's efforts at meeting the requirements of SBX7-7. The UWMP also serves as a foundational document for compliance with SB 610 and SB 221 in determining the necessity for a project to complete a water supply assessment.

City of San Diego General Plan

The following policies from the City of San Diego General Plan, adopted 2008, from the Public Facilities, Services, and Safety Element and Conservation Element are applicable to water supply, treatment, and distribution facilities.

Water Infrastructure

- PF-H.1 Optimize the use of imported supplies and improve reliability by increasing alternative water sources to: provide adequate water supplies for present uses, accommodate future growth, attract and support commercial and industrial development, and supply local agriculture.
 - a. Prepare, implement, and maintain, long-term, comprehensive water supply plans and options in cooperation with the appropriate state and federal agencies, regional authorities, water utilities, and local governments.
 - b. Develop, coordinate, facilitate, and implement water conservation plans and projects that are sustainable in reducing water demands.
 - c. Develop potential groundwater resources and storage capacity, combined with management of surface water in groundwater basins to meet overall water supply and resource management objectives.
 - e. Continue to develop the recycled water customer base, and expand the distribution system to meet current and future demands.
 - f. Consider and evaluate water transfers.
 - g. Optimize storage, treatment and distribution capacity of potable water systems.
- PF-H.2 Provide and maintain essential water storage, treatment, supply facilities and infrastructure to serve existing and future development.
- PF-H.3 Coordinate land use planning and water infrastructure planning with local, state, and regional agencies to provide for future development, maintain adequate service levels, and develop water supply options during emergency situations.
 - a. Plan for a water supply and emergency reserves to meet peak load demand during a natural disaster such as a fire or earthquake.

- b. Plan for water supply and emergency reserves recognizing anticipated Climate Change impacts.
- c. Recognize the water/energy nexus. Plan and implement water projects after consideration of their energy demands in coordination with energy suppliers to minimize and optimize the energy impact of projects.

Coastal Resources

CE-C.7 Encourage conservation measures and water recycling programs that eliminate or discourage wasteful uses of water.

Water Resources Management

- CE-D.1 Implement a balanced, water conservation strategy as an effective way to manage demand by: reducing dependence on imported water supplies; maximizing the efficiency of existing urban water and agricultural supplies through conservation measures/programs; and developing alternative, reliable sources to sustain present and future water needs.
- a. Integrate watershed planning with water supply and land use studies to achieve an integrated approach to ensure that the City can provide adequate water supplies for present uses, accommodate future growth, attract and support commercial and industrial development, and supply local agriculture.
 - b. Manage groundwater and surface water resources and capacity through an integrated approach to meet overall water supply and resource management objectives.
 - c. Participate in advanced water treatment processes such as brackish groundwater and seawater desalination programs.
 - d. Emphasize and refine recycled water programs to help meet non-potable irrigation demands.
 - e. Develop and expand water-efficient landscaping to include urban forestry, urban vegetation, and demonstration projects.
 - f. Support regional efforts towards ensuring that imported water is reliable, cost effective, and is of high quality.
 - g. Maintain existing and future water supply, storage, treatment and distribution facilities with minimal or no impact to the environment.
 - h. Implement conservation incentive programs that increase water-use efficiency and reduce urban runoff.
 - i. Develop a response plan to assist citizens in reducing water use during periods of water shortages and emergencies.
 - j. Encourage local water agencies to use state-mandated powers to enforce conservation measures that eliminate or penalize wasteful uses of water.
 - k. Explore alternative conservation measures and technology as they become available.

- I. Review/update the City's landscaping regulations as needed to ensure they effectively address the efficient use of water in landscaping.
 - m. Educate the public on wise water use.
- CE-D.2 Protect drinking water resources by implementing guidelines for future development that may affect water supply watersheds, reservoirs and groundwater aquifers. The guidelines should address site design, Best Management Practices (BMPs) and storm water treatment measures.
- a. Collaborate with other jurisdictions to reduce the potential for polluted runoff to water supply reservoirs.
 - b. Enter into cooperative, voluntary agreements with other jurisdictions to enable the City to provide advisory review of development projects outside of the City's boundaries that may impact watersheds and reservoirs.
- CE-D.3 Continue to participate in the development and implementation of watershed management plans.
- a. Control water discharge in a manner that does not reduce reasonable use by others, damage important native habitats and historic resources, or create hazardous conditions (e.g., erosion, sedimentation, flooding and subsidence).
 - b. Protect reservoir capacity from sedimentation.
 - c. Improve and maintain drinking water quality and urban runoff water quality through implementation of Source Water Protection Guidelines for New Development.
 - d. Improve and maintain urban runoff water quality through implementation of storm water protection measures.
 - e. Encourage proper sustainable agricultural practices (if applicable) such as tillage, use of grass filter strips, runoff detention basins, and organic farming.
- CE-D.4 Coordinate local land use planning with state and regional water resource planning to help ensure that the citizens of San Diego have a safe and adequate water supply that meets existing needs and accommodates future needs.
- a. Consider and evaluate water transfers and other cost-effective ways to increase reliable supplies with minimal environmental effects, where it benefits the City, to help achieve a balanced and integrated water conservation strategy.

H.4 Impacts and Mitigation Measures

Significance Criteria

According to the City of San Diego's CEQA Significance Determination Thresholds, a significant impact with regard to the City's water supply could occur if implementation of the CAP results in the following:

- Use of excessive amounts of water.

Impacts

As indicated in Table 2-5 in Chapter 2, Project Description, the following proposed CAP actions could have an impact on water supply:

- **Action 1.5 Water Conservation and Disclosure Ordinance.** Supporting measures and steps that support implementation of this action could result in the construction of new or expansion of existing water recycling facilities and infrastructure, including potential modifications to wastewater treatment plants, installation of recycled water delivery systems, monitoring systems, etc.
- **Action 2.1 Community Choice Aggregation Program or Similar Program.** Supporting measures and steps that support implementation of this action could result in installation of small scale and large scale renewable energy generation, transmission, and storage systems. These could result in the demand for water to serve renewable energy facility needs.
- **Action 3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas.** These actions would facilitate the implementation of the City of Villages strategy and the shift to greater emphasis on mass transit and other modes of transportation. These actions could, therefore, result in new construction and other physical changes that could result in new or modifications to the existing infrastructure systems to support a more concentrated urban landscape.
- **Action 4.1 Divert Solid Waste and Capture Landfill Emissions.** This action could lead to the implementation of landfill gas collection operational procedures in compliance with the California Air Resources Board's Landfill Methane Capture regulations, as well as new or expanded programs to divert solid waste from landfill disposal. Some of these programs could result in increased demand for water.
- **Action 4.2 Capture Methane from Wastewater Treatment.** Associated actions could result in new or expanded wastewater treatment facilities, such as anaerobic digesters, that could increase demand for water.
- **Action 5.1 Urban Tree Planting Program.** This action aims to achieve 15% urban tree canopy coverage by 2020 and 35% coverage by 2035. The program includes water conservation measures to minimize water use for tree plantings. Includes use of drought-tolerant plantings and native trees and prioritizing planting in areas with recycled water and grey water infrastructure.

Issue 1: Would implementation of the CAP result in the excessive use of water?

The City's UWMP contains information pertinent to planning and securing adequate water supplies to serve the City of San Diego. The UWMP also describes the conservation measures the City is taking to reduce its current and future demand for potable water, which reflects the anticipated population in the City's General Plan. SB 610 and SB 221 require detailed information regarding water availability to be provided to the City and County decision-makers prior to approval of the following types of development projects:

- Residential developments of more than 500 units;

- Shopping centers or businesses employing more than 1,000 people or having more than 500,000 square feet of floor space;
- Commercial office buildings employing more than 1,000 people or having more than 250,000 square feet of floor space;
- Hotels or motels having more than 500 rooms;
- Industrial, manufacturing, or processing plants or industrial parks planned to house more than 1,000 people or having more than 650,000 square feet of floor space;
- Mixed use projects that include one or more of the above types of projects; and
- Projects that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

Although short-term increases in water demand from CAP-related construction projects could occur, proposed CAP Action 1.4 Water Conservation and Disclosure Ordinance and Action 1.5 Outdoor Landscaping Ordinance, would both have a long-term beneficial effect on water supply by supporting the City's existing water conservation efforts. Action 1.5 would result in more efficient landscape irrigation systems and encourage the installation of landscaping that uses less water. Through the use of recycled and grey water and selection of drought tolerant and low water demand species, long term reduction in water use would result from CAP Strategy 1, Actions 1-3, 1-4, and 1-5.

Action 2.1 of the CAP establishes a goal for the City to supply 100 percent of its electricity needs with renewable sources by 2035 through a community choice aggregation program or similar program, which would leverage the aggregated purchasing power of individual customers to purchase renewable energy on a large scale, and through encouraging local solar photovoltaic (PV) and solar water heater installations. Installation of small scale facilities, such as rooftop photovoltaic panels, would have minimal impacts on existing water supplies. Large scale renewable energy projects, such as solar and wind farms, could involve new, large or extensive facilities such as solar and wind farms. Substantial volumes of water could be required for construction and operation of such facilities. Future development of these large-scale renewable facilities would therefore be required to provide detailed information regarding water use and availability, if they demand an amount of water required by the development types listed above, as consistent with the requirements of SB 610.

Proposed CAP Action 3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas, and Action 3.6 Implement Transit-Oriented Development within Transit Priority Areas are intended to facilitate implementation of major changes to the urban landscape already planned for in the General Plan, Sustainable Communities Strategy, and other planning documents. These changes would result in the development of more dense, built-up, and transit and alternative transportation-oriented development, particularly within the TPAs. The Final Program Environmental Impact Report for the City's 2008 General Plan update (General Plan PEIR) determined that implementation of the General Plan would not result in significant impacts on the water supply because the anticipated demand would not exceed the

expected supply, sufficient alternatives have been identified in case of unanticipated water shortages, and there are multiple conservation efforts underway to reduce the demand.

Implementation of Actions 4.1 and 4.2 would result in alterations to the existing solid waste management system to increase diversion of materials from the landfill and to increase methane capture from landfills and wastewater treatment plants. Such improvements could result in construction activities within the existing footprint of affected landfill and wastewater facilities, and potentially result in short-term increases in demand for water. Some facilities that may be developed pursuant to these proposed actions, such as composting facilities and anaerobic digesters, require use of water for processing; development of these facilities may therefore result in increased demand for water. Any expansions to existing facilities or development of new facilities would be subject to existing City policies and regulations. Impacts to the water supply during construction are considered adverse, but because they are of short duration and extent, the impact on water supply would not be substantial.

Implementation of Action 5.1 would increase the urban tree canopy coverage. The program includes water conservation measures to minimize water use for tree plantings, use of drought-tolerant plantings and native trees, and prioritizing planting in areas with recycled water and grey water infrastructure. Although the increase in urban tree canopy would result in additional use of water, the program would be developed to conform to current and future water use restrictions. The use of recycled water and drought tolerant and native planting and tree species would also reduce the demand for water.

Significance of Impact

Most CAP actions would not result in new or more severe impacts on water supply, and would not affect the ability of the City of San Diego or the San Diego County Water Authority's ability to provide water. Development of large-scale renewable energy facilities and other facilities would be required to provide detailed information regarding water use and availability, if they demand an amount of water required by the development types listed above, as consistent with the requirements of SB 610, and as outlined in the Mitigation Framework, below.

Mitigation Framework

Mitigation Measure WS-1: Water Supply Assessment. In order to ensure that large-scale renewable energy projects do not use excessive amounts of water, a Water Supply Assessment (WSA) shall be submitted for review as part of the subsequent environmental review process. The WSA shall demonstrate that the proposed project would not demand an amount of water greater than the amount required by a 500 dwelling unit project.

Significance after Mitigation

Implementation of the Mitigation Measure WS-1 would serve to reduce impacts associated with future development of large-scale renewable energy projects which could demonstrate compliance with SB 610. Therefore, the program-level impact would be reduced to below a level of significance.

CHAPTER 4

History of Project Changes

A. Project Background

The City of San Diego's first Climate Protection Action Plan (CPAP) was approved in 2005 and focused on the City's mission to reduce emissions from municipal operations. The CPAP was central to fostering heightened awareness and developing "climate change literacy" within the City and the community.

Similarly, the City of San Diego General Plan (General Plan), updated in 2008, is the framework for the City's commitment to long-term conservation, sustainable growth, and resource management. It addresses GHG emission reductions through its City of Villages growth strategy and a wide range of interdisciplinary policies.

In 2010, the City embarked on development of a draft Climate Mitigation and Adaption Plan (CMAP). The draft CMAP was the initial GHG reduction plan considered by the City that provided policy direction and identified actions that the City and community could take to reduce GHG emissions consistent with AB 32. The City released a draft of the CMAP in August, 2012, but the plan was never adopted.

B. CAP

In 2013, the City began work on the Climate Action Plan (CAP). The CAP identifies measures to reduce the City's carbon footprint consistent with General Plan Policy CE-A.2 and updates the City's Climate Protection Action Plan consistent with General Plan Policy CE-A.13.

Three versions of the CAP have been released for public review (February 2014, September 2014, and March 2015). Each version of the CAP contained edits and changes, but kept the main focus of achieving GHG emissions reductions through five strategies: Energy and Water Efficient Buildings; Clean and Renewable Energy Resources; Biking, Walking and Transit; Zero Waste Management; and Climate Resiliency. Each version of the CAP has included goals and Actions to achieve GHG reductions in 2020 and 2035. The March 2015 version of the CAP included appendices outlining the calculations used to determine the GHG emissions reductions from each action and a map of Transit Priority Areas.

With the release of this Draft PEIR, the City of San Diego has also completed the July 2015 version of the CAP. Revisions to the CAP in the July 2015 version include adding text and calculations to demonstrate compliance with Executive Order B-30-15. The July 2015 version

includes a CAP Consistency Checklist to provide a streamlined review process for the GHG emissions analysis of proposed new development projects subject to discretionary review and trigger environmental review under CEQA. The July 2015 CAP also includes a companion document, Draft Greenhouse Gas Emissions Screening Criteria, to determine whether or not development projects have a significant impact on the environment.

City Staff intended to have the CAP Consistency Checklist and Draft Greenhouse Gas Emissions Screening Criteria (Screening Criteria) brought forward with the CAP, but during public review, City Staff received substantial comments including disagreements with the methodologies and science and regarding a lack of specificity used in developing the CAP Consistency Checklist and Screening Criteria. As such, a decision was made to move forward with the CAP alone. City Staff will continue to work on the CAP Consistency Checklist and a GHG Emissions Threshold to address the noted concerns and present them for City Council consideration in 2016.

For the Adoption Draft of the CAP (December 2015), the GHG emissions baseline, state and local targets, and forecasted reductions numbers have been updated to reflect the most up-to-date modeling and GHG reduction methodology. The CAP Appendices have been updated as well to clarify how these numbers were determined.

C. CAP PEIR

On February 18, 2015, the City sent a Notice of Preparation (NOP) to responsible, trustee, and federal agencies, as well as to organizations, and individuals potentially interested in the CAP PEIR, and a public scoping meeting was held on March 2, 2015. Subsequent to the NOP, City staff determined during project review to add analysis of historical resources (archaeology) to Section 3.E, Historical Resources. This section now includes archaeological resources impact analysis, and Mitigation Framework HIST-1.

Changes made to the CAP since the release of the Draft PEIR are reflected in the Final PEIR in ~~strikeout~~/underline.

CHAPTER 5

Growth Inducement

A. Introduction

The CEQA *Guidelines* Section 15126.2(d) requires that an EIR evaluate the growth-inducing impacts of a proposed action. A growth-inducing impact is defined by the CEQA *Guidelines* as:

[T]he ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth ... It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

The following sections address these issues as they relate to implementation of the proposed project.

B. Growth Inducing Effects of the Proposed Project

A project can have direct and/or indirect growth-inducement potential. Direct growth inducement would result if a project involved construction of new housing. A project can have indirect growth-inducement potential if it would establish substantial new permanent employment opportunities (e.g., commercial, industrial or governmental enterprises) that would encourage development of new housing for employees, or if it would involve a substantial construction effort creating short-term employment opportunities. Similarly, under CEQA, a project would indirectly induce growth if it would remove an obstacle to additional growth and development, such as removing a constraint on a required public service. Infrastructure projects could also indirectly stimulate growth by enhancing access to properties, or increasing their desirability for development.

Increases in population could tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. The CEQA *Guidelines* also require analysis of the characteristics of projects that may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.

The timing, magnitude, and location of land development and population growth are based on various interrelated land use and economic variables. Key variables include regional economic trends, market demand for residential and non-residential uses, land availability and cost, the availability and quality of transportation facilities and public services, proximity to employment centers, the supply and cost of housing, and regulatory policies or conditions. Since a general plan

defines the location, type and intensity of growth, it is the primary means of regulating development and growth in California.

~~As discussed in Chapter 2, Project Description, the CAP includes a CAP Consistency Checklist to provide a streamlined review process for the GHG emissions analysis of proposed new development projects that are subject to discretionary review and trigger environmental review under CEQA. The use of the CAP Consistency Checklist does not remove the requirement to analyze any other potential environmental impact required under CEQA for a proposed new development project and therefore the Checklist is not considered to contribute to a growth-inducing impact.~~

Growth from the Proposed Project

The City of San Diego's General Plan (2008) provides land use development patterns and growth policies that allow the planned and orderly expansion of development supported by adequate public services. A project that would induce unplanned growth could indirectly cause additional adverse environmental and public services impacts not previously envisioned. To assess whether implementation of the CAP will result in growth inducing effects beyond what is currently anticipated by the City of San Diego, this PEIR must analyze the degree to which the growth associated with implementation of the CAP would be consistent with the General Plan.

The Final Program Environmental Impact Report for the City's 2008 General Plan update (General Plan PEIR) discussed the growth-inducing impacts of the General Plan in *Chapter 4, Growth Inducement*. The detailed discussion provided in the General Plan PEIR is fully incorporated into this PEIR by this reference. The General Plan PEIR found that implementation of the General Plan is growth accommodating in that it provides direction for the planning and management of population growth, and growth inducing in that it facilitates economic expansion and may result in infrastructure improvements (i.e. water, sewer, circulation systems) that could further remove existing obstacles to growth.

The General Plan provided goals and policies for redevelopment, infill, and new growth in compact, mixed-use activity areas that are pedestrian-friendly, center of community, and linked to the regional transit system. The SANDAG Sustainable Communities Strategy (SCS) relies on this type of development to reduce vehicle miles traveled, and thus GHG emissions in their effort to meet the requirements of SB 375.

The CAP would not revise the General Plan Planning Area or sphere of influence, and through the year 2020 would not allow additional development compared to the amount disclosed in the General Plan PEIR. Importantly, CAPs are not, by their nature, growth inducing. The CAP provides a framework for reducing greenhouse gas emissions from existing and future development that has previously been planned for in the General Plan. The CAP relies on the intensification of land uses around Transit Priority Areas and this growth has already been accounted for in the General Plan and SCS.

The CAP actions promote the internal relationship of mutually supportive uses in transit-oriented areas so as to decrease dependency on the automobile, encourage alternative transportation modes, make efficient use of land and infrastructure, reduce energy consumption, and promote sustainability.

The specific environmental effects resulting from the implementation of the CAP are discussed in the environmental issue areas in Chapter 3, Environmental Setting, Impacts, and Mitigations. The CAP would not, on its own, induce population growth in the City of San Diego, beyond that already identified in the General Plan PEIR. As a result, the proposed project is not considered to be growth-inducing.

The specific environmental effects resulting from the direct growth effects of proposed land use patterns and associated extension and/or improvement of public services by the year 2020 are discussed in Chapter 3, Sections 3.A through 3.H, of this Draft PEIR. The following is a discussion of the growth-inducing effects of implementing the CAP.

Employment Growth

The CAP notes that there are considerable economic benefits in implementing CAP strategies, including promoting job creation through capital improvements and corresponding research, develop and innovation. The CAP does not estimate the number of jobs that would be created, but notes that implementation of the CAP strategies could create jobs in wind, solar, biofuels, and transportation.

Implementation of the CAP would provide a small number of temporary construction jobs to retrofit existing development or construct new energy-generating structures. It is likely that the majority of these positions would be filled from the existing labor pool in and around the City of San Diego. Therefore, the creation of new jobs is not expected to result in a substantial increase in the demand for additional housing or services, and is not expected to be growth-inducing. The CAP facilitates development in Transit Priority Areas that have already been planned for. The growth-inducing and growth-accommodating tendencies of these developments have already been considered in the General Plan PEIR, and the CAP would not add to or increase these effects.

Growth Effects Associated with Infrastructure Improvements

The future development facilitated by a proposed project could indirectly induce growth if it would remove an obstacle to additional growth and development, such as removing a constraint on a required public service.

The General Plan includes proposed roadway improvements that have been designed to support the General Plan Land Use Diagram and to maintain the City's proposed level of service (LOS) standard of LOS D, where feasible and appropriate. The General Plan does not include any provisions requiring the oversizing of infrastructure facilities to serve growth not anticipated in the General Plan.

The CAP does not propose development other than what is already identified in the General Plan, and would not induce growth in an area that is not already developed with infrastructure to accommodate such growth. It does not call for the construction of major new roadways or utility systems in undeveloped areas that would stimulate development in those undeveloped areas. Further, while certain project elements may require the construction of solar panel systems, alternative transportation infrastructure, waste management facilities, and retrofitting buildings, these project elements would improve existing resources, and would not create infrastructure to serve new development.

Thus, the proposed project would not induce growth by removing infrastructure barriers or by providing infrastructure to serve new development, nor would it create new transportation access to a previously inaccessible area.

C. Environmental Effects of Growth

As described above, the CAP would not, in itself, induce population growth in the City, although it would allow for more growth in the “green job” employment field. However, the CAP is not considered to be growth-inducing as it only projects the growth anticipated by the General Plan.

CHAPTER 6

Cumulative Impacts

A. Introduction

The term “cumulative impacts,” as defined in §15355 of the CEQA *Guidelines*, refers to two or more individual effects that, when taken together, are “considerable” or compound or increase other environmental impacts. A cumulative impact from multiple projects is the change in the environment that could result from the incremental impact of the Project when added to other closely related past, present, and reasonably foreseeable (i.e., probable) future projects. CEQA *Guidelines* §15130 provides pertinent guidance for cumulative impact analysis:

- An EIR shall discuss the cumulative impacts of a project when the project’s incremental effect may be individually limited, but “cumulatively considerable,” meaning that the project’s incremental effects are significant when viewed in connection with the effects of past, current, and probable future projects. An EIR should not discuss impacts that do not result in part from the Project evaluated in the EIR.
- A project’s contribution is less than cumulatively considerable, and thus not significant, if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact.
- The focus of the analysis should be on the cumulative impact to which the identified other projects contribute, rather than on attributes of the other projects that do not contribute to the cumulative impact.

Two approaches to a cumulative impact analysis are provided for in CEQA *Guidelines* §15130(b)(1): (a) the analysis can be based on a list of past, present, and probable future projects producing related or cumulative impacts; or (b) a summary of projections contained in a general plan or related planning document or in an adopted or certified prior environmental document that described or evaluated regional or area wide conditions contributing to the cumulative impact. For the purpose of this EIR, the analysis employs the plan-based approach, as described in the following section.

B. Projects with Potential Cumulative Impacts

The cumulative setting conditions considered in this PEIR is the policies, programs, and land use designations contained in the City of San Diego General Plan (2008). Other relevant plans or programs also considered in the cumulative analysis include the City’s community plans, the SANDAG Regional Transportation Plan, the Pure Water Program, and the Downtown Mobility

Specific Plan, as described below. The PEIR cumulative analysis focuses on whether there is a significant cumulative impact from one or more of these plans in combination with the CAP, and whether the CAP's incremental effect would be cumulatively considerable.

City of San Diego General Plan

The City's General Plan, updated in 2008, sets out a long-range vision and comprehensive policy framework for how the City should grow and develop, provide public services, and maintain the qualities that define San Diego over the next 20 to 30 years. It provides a strategy, the City of Villages, for how the City can enhance its many communities and neighborhoods as growth occurs over time. The City of Villages strategy focuses growth into mixed use activity centers that are pedestrian-friendly districts linked to an improved regional transit system. The strategy draws upon the character and strengths of San Diego's natural environment, neighborhoods, commercial centers, institutions, and employment centers. The strategy is designed to sustain the long-term economic, environmental, and social health of the City and its many communities. It recognizes the value of San Diego's distinctive neighborhoods and open spaces that together form the City as a whole.

A "village" is defined as the mixed-use heart of a community where residential, commercial, employment, and civic uses are all present and integrated. Each village will be unique to the community in which it is located. All villages will be pedestrian-friendly and characterized by inviting, accessible and attractive streets and public spaces. Public spaces will vary from village to village, consisting of well-designed public parks or plazas that bring people together. Individual villages will offer a variety of housing types affordable for people with different incomes and needs. Over time, villages will connect to each other via an expanded regional transit system.

Local Community Plans

The City has 52 community planning areas and 48 community plans. These community plans are an integral part of the General Plan as they provide more detailed land use designations, focused policies, and implementation recommendations that work to further implement City-wide and community goals. Since the General Plan was updated in 2008, the City Council has adopted new community plans for Barrio Logan, Otay Mesa and Ocean Beach. The Otay Mesa Community Plan update is currently in effect, the Ocean Beach Community Plan is awaiting California Coastal Commission certification, and the Barrio Logan Community Plan was repealed by voter referendum. The City's Planning Department is currently updating the San Ysidro, Southeastern, Encanto, Uptown, North Park, Golden Hill, Midway, Old Town, and Mission Valley plans. In addition, a Focused Plan Amendment was recently completed for the Grantville section of the Navajo Community Plan.

SANDAG 2050 Regional Transportation Plan and Sustainable Communities Strategy

The 2050 Regional Transportation Plan and Sustainable Communities Strategy (2050 RTP/SCS), adopted by SANDAG in 2011, presents a transportation system designed to maximize transit enhancements, integrate biking and walking elements, and promote programs to reduce demand and increase efficiency. One key theme of the Regional Transportation Plan (RTP) is to improve the connections between land use and transportation plans by using smart growth principles. The 2050 RTP includes a Sustainable Communities Strategy (SCS) that integrates land use planning, housing development, and transportation planning. The SCS also addresses how the transportation system will be developed in such a way that the region reduces per-capita GHG emissions to state-mandated levels. The SCS identifies a land use pattern that accommodates the region's future employment and housing needs, and protects sensitive habitats and resource areas. To accomplish this in a sustainable manner, the 2050 RTP/SCS land use pattern focuses housing and jobs growth in existing urbanized areas, protects about 1.3 million acres of land, and invests in a transportation network that provides residents and workers with alternatives to driving alone. Further, new development would be more compact and more accessible to public transit and other travel choices, such as walking and bicycling. SANDAG issued the Draft San Diego Forward Regional Plan, a plan that combines the Regional Comprehensive Plan (RCP) and the RTP/SCS into one Regional Plan, on April 2015 for public review and comment.

City of San Diego Pure Water Program

Pure Water San Diego is the City's 20-year program to provide a safe, reliable and cost-effective drinking water supply for San Diego. Program components include the construction of water purification facilities, continued operation of the test Advanced Water Purification Facility, research on additional treatment barriers for a potential direct potable reuse project, regulation and legislation development, and an education and outreach program. An initial 15-million gallon per day water purification facility is planned to be in operation by 2023. The long-term goal, producing 83 million gallons of purified water per day (one third of San Diego's future drinking water supply), is planned to be reached by 2035. The Program will divert approximately 100 MGD of wastewater from Point Loma to three future advanced water purification facilities located at the North City Water Reclamation Plant, South Bay Water Reclamation Plant and a future central area facility.

Downtown San Diego Mobility Plan

The Downtown San Diego Mobility Plan ("Mobility Plan") establishes policies, programs and projects that will improve overall mobility throughout the Downtown San Diego area. The Mobility Plan provides for the development of a cohesive network of complete streets, which will 1) increase priority and safety for bicyclists and pedestrians by providing supportive facilities and amenities; 2) provide desirable connections for all users to public parks, main shopping areas, entertainment facilities, major attractions, the waterfront, surrounding communities, and the

regional transportation network; and 3) support reductions in greenhouse gas emissions. Adoption of the Plan is expected in the summer of 2015.

C. Cumulative Impact Analysis

The affected area for the cumulative impacts analysis is the City of San Diego as described in the General Plan, and as outlined in Chapter 1, Introduction and Environmental Setting, and shown on Figure 2-1. As discussed in Chapter 3, Environmental Impacts and Mitigation Measures, implementation of the CAP would result in few significant impacts, other than those previously identified in the City of San Diego General Plan PEIR. These include significant impacts to visual effects and neighborhood character; air quality; historical resources; utilities, and transportation and circulation. While the CAP proposes several actions that would mitigate air quality and transportation impacts, including Action 3.2 Implement the City's Pedestrian Master Plan in Transit Priority Areas, Action 3.3 Implement the City's Bicycle Master Plan, Action 3.4 Implement a Traffic Signal Master Plan, and Action 3.5 Implement a Roundabouts Master Plan, the analyses in Chapter 3 conclude that these mitigating actions would not be sufficient to reduce impacts related to implementation of the City of Villages strategy to less than significant. In addition, proposed Action 3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas and Action 3.6 Implement Transit-Oriented Development within Transit Priority Areas, would facilitate and intensify development within the Transit Priority Areas. The intensification of development (e.g. higher density development) could result in greater population in a given area, with taller buildings or buildings with greater massing, which may potentially exacerbate the significant impacts already identified in the General Plan EIR. Therefore, CAP Actions 3.1 and 3.6 could contribute to cumulatively significant impacts in the areas of visual effects and neighborhood character; air quality; historical resources; utilities, and transportation and circulation associated with implementation of the City of Villages strategy, and the CAP's incremental effect could be cumulatively considerable in these areas. However, the potential for significant unavoidable impacts associated with implementation of the City of Villages strategy have already been identified in the General Plan PEIR. CAP Actions 3.1 and 3.6 would not change or exacerbate these impacts. Therefore, for the purpose of this PEIR, the cumulative impacts associated with the City of Villages strategy are considered less than significant.

Potential cumulative impacts to land use, visual resources and neighborhood character, air quality, and greenhouse gas emissions may be associated with development of large-scale renewable energy facilities as a result of CAP Action 2.1 Community Choice Aggregation Program or Another Program, when viewed cumulatively with the impacts of the plans listed above. These impacts, however, would be reduced to less than significant through implementation of Mitigation Measure LU-1 (see Section 2.A, Land Use), which would establish siting guidelines and a process for ensuring appropriate siting of such facilities.

Other CAP Actions identified as having the potential for cumulative impacts are those that could result in development of new or expanded facilities for reduced water consumption, waste recycling, and methane recovery facilities, and that call for increased frequency of recycling and

organic waste collection programs (CAP Action 1.3: Support water rate structures that provide pricing signals that encourage water conservation and reuse, Action 1.5: Outdoor Landscaping Ordinance, Action 4.1 Divert Solid Waste and Capture Landfill Emissions, and Action 4.2 Capture Methane from Wastewater Treatment). Potentially significant cumulative impacts related to Action 4.1 include cumulative impacts to air quality and GHG emissions, but these would be mitigated to less than significant with Mitigation Measure AIR-1 that requires use of low-emission alternative fuels in trucks. Other CAP Actions may result in site-specific impacts with a low potential to contribute to cumulative effects such as energy efficiency retrofits (Action 1.1 Present to City Council for consideration a Residential Energy Conservation and Disclosure Ordinance; Action 1.2 Present to City Council for consideration a Municipal Energy Strategy and Implementation Plan) to existing buildings, low-water landscaping, (Action 1.5: Outdoor Landscaping Ordinance) and minor changes to streetscapes to better accommodate pedestrians and bicycles. These Actions would result in small, diffuse, and generally low-impact changes and therefore would not contribute to cumulatively significant impacts.

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CHAPTER 7

Other CEQA Considerations

A. Effects Found Not to be Significant

As required by Section 15128 of the CEQA *Guidelines*, an EIR must contain a brief discussion stating the reasons why certain environmental effects of the City of San Diego Climate Action Plan (CAP) Project were determined not to be significant and are therefore not discussed in detail in this PEIR. In accordance with the CEQA *Guidelines*, this Chapter discusses the environmental issue areas where impacts were found to not be significant. These discussions address the CEQA checklist questions and thresholds developed by the City of San Diego for each of the environmental topic areas.

Agricultural Resources

Threshold: Would the Project result in the conversion of a substantial amount of Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Within the City of San Diego, there are about 15,900 acres of land designated for agricultural uses, representing only about one percent of the City's total land area of 219,241 acres. The majority of agricultural production in the City is located in San Pasqual Valley (approximately 14,000 acres), in Otay Mesa, and in the Tijuana River Valley. These areas include lands designated as Prime Farmland, Unique Farmland, and Farmland of Statewide Importance. Many of the CAP Actions include activities that would take place in urban and developed areas, for example disclosing the energy efficiency of residential buildings (Action 1.1 Present to City Council for consideration a Residential Energy Conservation and Disclosure Ordinance), modification of transportation facilities such as re-timing traffic signals or installing roundabouts (Action 3.4 Implement a Traffic Signal Master Plan to retime traffic signals to reduce vehicle fuel consumption and Action 3.5 Implement a Roundabouts Master Plan to install roundabouts to reduce vehicle fuel consumption), and expansion of bicycle commuter amenities (Action 3.3 Implement the City of San Diego's Bicycle Master Plan to increase commuter bicycling opportunities). As a result, these Actions would not result in the conversion of farmland.

Action 2.1 of the CAP targets achievement of a 100 percent renewable supply of electricity by 2035 through consideration of a Community Choice Aggregation (CCA) or other program. As stated in the Land Use section of this PEIR (Section 3.A), this may encourage or facilitate the development of larger renewable energy systems including large-scale solar PV and solar thermal

facilities; on- and off-shore wind turbines, tidal and water power systems, geothermal systems, and hydropower systems; and biomass systems; as well as new or upgraded transmission lines, substations, and energy storage systems. In general, larger-scale renewable energy facilities within the City's limits would be located in industrial areas, industrial brownfields, and near existing utility infrastructure. This would include areas designated in the City's General Plan (2008) for industrial uses, institutional, public, and semi-public facilities, and military uses. Therefore, no substantial loss of agricultural lands would be expected within City limits since these facilities would generally be located outside of agricultural lands.

Outside of the City limits, development of large-scale renewable energy facilities may occur on private or public lands, including land designated for agricultural use. Such developments could be proposed for locations with general plan or zoning designations incompatible with facilities of this kind. In such cases, it would be the responsibility of the agency with land use authority over the project site to ensure that developments were compatible with existing designations or zoning, or that no construction of large-scale renewable energy facilities would convert any farmlands of statewide significance to non-agricultural use. Therefore, the loss of agricultural lands either would not occur, or would be resolved by the local agency. In either case, it is anticipated that the loss or conversion of farmlands will be considered in the planning and environmental review process for proposed facilities.

The CAP has been prepared to be consistent with the City's General Plan, and supports implementation of the City's General Plan to achieve better walkability and transit-supportive densities. The City's General Plan calls for infill and redevelopment of areas with existing development. The resulting intensification within selected urbanized areas is expected to reduce development pressures on vacant and undeveloped land including farmland. For these reasons, the adoption and implementation of the CAP would not result in the conversion of farmland to non-agricultural uses, and no significant impact would occur.

Threshold: Would the Project conflict with existing zoning for agricultural use, or Williamson Act contract?

Many of the Actions included in the CAP would involve modifications to existing structures and facilities in developed areas (Action 1.1 Present to City Council for consideration a Residential Energy Conservation and Disclosure Ordinance, Action 1.2 Present to City Council for consideration a Municipal Energy Strategy and Implementation Plan, Action 1.4 Present to City Council for consideration a Water Conservation and Disclosure Ordinance, and Action 1.5 Implement an Outdoor Landscaping Ordinance that requires use of weather-based irrigation controllers), and would support City plans and policies calling for intensification within urbanized areas (Action 3.1 Implement the General Plan's Mobility Element and the City of Villages Strategy in Transit Priority Areas to increase the use of Transit); therefore, those Actions would not result in conflicts with existing zoning for agricultural use. Development of larger renewable energy systems that could result from implementation of Action 2.1 (Present to City Council for consideration a CCA or another program that increases the renewable energy supply on the electrical grid) would likely occur within the City's jurisdictional limits in industrial areas and near existing utility infrastructure; therefore, they are also not likely to conflict with existing

agricultural zoning. Additionally, the City of San Diego does not contain land subject to a Williamson Act contract. For these reasons, the implementation of the CAP would not result in a conflict with existing zoning for agricultural use or Williamson Act contracts within the City's jurisdiction, and no impact would occur. As stated above, development of larger-scale renewable energy facilities may occur outside the City's jurisdictional limits. Potential land use conflicts with lands zoned for agricultural use or Williamson Act contracts either would not occur, or would be resolved by the local agency. It is anticipated that impacts to agricultural lands will be considered in the planning and environmental review process for proposed facilities and therefore these potential impacts were determined to not be significant.

Threshold: Would the project involve other changes in the existing environment which due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

For the reasons stated above, the implementation of the CAP would not result in the conversion of farmland to non-agricultural uses for Actions occurring within the City's jurisdictional limits, and no impact would occur. The conversion of farmland to non-agricultural use could occur for large-scale renewable energy projects occurring outside the City's limits. However, as these impacts would be subject to further review in the planning and environmental review process for the proposed facilities, these potential impacts were determined to not be significant.

Biological Resources

Threshold: Would the Project have a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in the MSCP or other local or regional plans, policies or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS)?

The Conservation Element of the City's General Plan includes policies intended to maintain and enhance biodiversity in the region and conserve viable populations of endangered, threatened, and key sensitive species and their habitats. The CAP has been prepared to be consistent with the City's General Plan, and implementation of CAP Actions would be subject to policies included in the General Plan Conservation Element. Additionally, implementation of the CAP as a component of a specific project would be subject to all applicable regulations regarding sensitive species, including the City's adopted Multiple Species Conservation Program (MSCP) Subarea Plan, Environmentally Sensitive Lands (ESL) ordinance, and Land Development Code Biology Guidelines, as well as applicable regulations of the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

Projects implemented pursuant to the CAP Actions would primarily take place in urban and developed areas and would not generally require new areas of ground disturbance. Implementation of the CAP would also involve disclosing the energy efficiency of residential buildings (Action 1.1 Present to City Council for consideration a Residential Energy Conservation and Disclosure Ordinance, modification of transportation facilities (Action 3.4 Implement a Traffic Signal Master Plan to retime traffic signals to reduce vehicle fuel consumption and Action 3.5 Implement a Roundabouts Master Plan to install roundabouts to reduce vehicle fuel consumption), and expansion

of infrastructure supporting alternative modes of transportation like bicycles (Action 3.3 Implement the City of San Diego's Bicycle Master Plan to increase commuter bicycling opportunities). The CAP also supports implementation of City plans and policies that are intended to achieve better walkability and transit-supportive densities. The resulting intensification within selected urbanized areas is expected to reduce development pressures on vacant and undeveloped land, and therefore not result in impacts to sensitive species habitat. Therefore, implementation of CAP Actions that are confined to existing urban areas is not expected to have a substantial adverse impact on any species identified as a candidate, sensitive or special status species.

New infrastructure may be necessary for increased solid waste diversion programs to achieve zero waste under CAP Action 4.1, or for increased methane capture at wastewater treatment plants under CAP Action 4.2. It is anticipated that new infrastructure associated with implementation of these CAP Actions, such as footings or pipelines, would be located within the existing disturbed footprint of the facility and would not generally require new ground disturbance. Development of new facilities, such as composting facilities or material recovery facilities, that may involve disturbance of previously undisturbed ground, would be subject to existing policies and regulations intended to protect biological resources. Projects of this kind and scale would also be subject to project-level CEQA review, which would examine the potential for impacts to biological resources.

Action 2.1 of the CAP targets achievement of a 100 percent renewable supply of electricity by 2035 through consideration of a CCA or other program. While the CAP does not propose to construct any site-specific renewable energy infrastructure projects, this Action could result in the development of small-scale renewable energy systems (such as residential and commercial roof-top solar PV systems). This type of small-scale project would generally result in minimal environmental impacts. There is the potential, however, for development of renewable energy facilities in undeveloped areas and more sensitive areas, both within and outside the City limits. Within the City limits, any such development would be subject to the restrictions and requirements of the MSCP Subarea Plan, ESL ordinance, and the Biology Guidelines. Such projects would be required to comply with the MSCP Land Use Adjacency Guidelines, which require all projects to ensure that site drainage is not directed into MSCP lands, measures are incorporated to reduce potential for chemicals to enter the MHPA lands, lighting is directed away from MHPA lands and buffered by landscaping where possible, noises are minimized and excessive noise during the breeding season is curtailed, and barriers are constructed along new development to protect MHPA lands from the public. Any renewable energy project proposed to implement CAP Action 2.1 would be subject to the ESL Ordinance, Section 143.01 of the Land Development Code, which would reduce impacts to these areas. Therefore, conflicts or inconsistencies with these plans are not expected to occur within the City and are not expected to have a substantial adverse impact on any species identified as a candidate, sensitive or special status species.

Outside of the City limits, development of large-scale renewable energy facilities may occur on private or public lands. Such developments could be proposed for locations within the boundaries of adopted habitat conservation plans or other environmental plans. In such cases, it would be the responsibility of the agency with land use authority over the project site to ensure that such

developments were compatible with the requirements of any such plans. Therefore, conflicts either would not occur, or would have to be resolved by the local agency. In either case, it is anticipated that any impacts on sensitive biological resources would be identified and mitigated through the planning process for proposed facilities and therefore would not have a substantial adverse impact on any species identified as a candidate, sensitive or special status species.

In summary, most CAP actions do not have the potential to result in adverse impacts to sensitive species and their habitats. Where such a potential does exist, projects undertaken pursuant to CAP actions would be required to adhere to existing policies and regulations, and would also be subject to further environmental review. Therefore, at the program level, the CAP would not have a significant effect on sensitive species and their habitats.

Threshold: Would the Project have a substantial adverse impact on any Tier I Habitats, Tier II Habitats, Tier IIIA Habitats, or Tier IIIB Habitats as identified in the Biology Guidelines of the Land Development manual or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?

Because CAP strategies and actions would primarily take place in urban and developed areas, and because associated infrastructure would be located within the disturbed footprint of existing facilities, impacts on Tier I, Tier II, Tier IIIA and Tier IIIB habitats or other sensitive natural communities are not expected as a result of implementation of the CAP. Implementation of the CAP as a component of a specific project would also be subject to policies included in the General Plan's Conservation Element, as well as other local, state and federal regulations regarding sensitive habitats. For these reasons, implementation of the CAP would not result in a substantial adverse impact on any Tier I, Tier II, Tier IIIA and Tier IIIB habitats, or other identified sensitive natural communities.

Threshold: Would the Project have a substantial adverse impact on wetlands (including, but not limited to, marsh, vernal pool, riparian, etc.) through direct removal, filling, hydrological interruption, or other means?

CAP Actions would primarily take place in urban and developed areas, and associated infrastructure would be located within the disturbed footprint of existing facilities. Therefore, impacts on wetlands are not expected as a result of implementation of the CAP. Implementation of the CAP as a component of a specific project would also be subject to policies included in the General Plan's Conservation Element, as well as other local, state and federal regulations regarding wetlands, including applicable regulations of the U.S. Army Corps of Engineers. For these reasons, implementation of the CAP would not result in a substantial adverse impact on wetlands.

Threshold: Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages identified in the MSCP Plan, or impede the use of native wildlife nursery sites?

It is unlikely that implementation of the CAP Actions would impact wildlife movement or migration or impede native wildlife nursery sites, because CAP Actions would primarily take

place in urban and developed areas, and associated infrastructure would be located within the disturbed footprint of existing facilities. Implementation of the CAP as a component of a specific project would be subject to all applicable regulations regarding animal species and habitats, including the City's adopted MSCP Subarea Plan, which includes identification of wildlife corridors as part of the regional planning effort. In addition, implementation of the CAP would be subject to the Migratory Bird Treaty Act (MBTA), which prohibits taking, killing, possessing, transporting, and importing of migratory birds, parts of migratory birds, and their eggs and nests, except when specifically authorized by the Department of the Interior. For these reasons, implementation of the CAP would not result in a substantial adverse impact on wildlife movement, wildlife corridors, and wildlife nursery sites.

Threshold: Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan, either within the MSCP plan area or in the surrounding region?

Implementation of the CAP would not result in conflicts with the provisions of the MSCP or other approved local, regional or state habitat conservation plan because CAP Actions would primarily take place in urban and developed areas, and associated infrastructure would be located within the disturbed footprint of existing facilities. Additionally, implementation of the CAP as a component of a specific project within or adjacent to a habitat conservation plan area would be subject to all provisions and requirements associated with that plan, further minimizing any potential for conflict. For these reasons, implementation of the CAP would not result in a substantial adverse impact regarding conflicts with habitat conservation plans.

Outside of the City limits, development of large-scale renewable energy facilities may occur on private or public lands. Such developments could be proposed for locations within the boundaries of adopted habitat conservation plan areas or other approved local, regional, or state habitat conservation plan areas. In such cases, it would be the responsibility of the agency with land use authority over the project site to ensure that such developments were compatible with the requirements of any such plans. Therefore, conflicts either would not occur, or would be resolved by the local agency. In either case, it is anticipated that any impacts on sensitive biological resources would be identified and mitigated through the planning process and would not result in a substantial adverse impact regarding conflicts with habitat conservation plans.

Threshold: Would the Project introduce land use within an area adjacent to the MHPA that would result in adverse edge effects?

Policies incorporated into the City's General Plan result in infill and redevelopment of areas with existing development and therefore lessen development pressure on vacant or sensitive areas. The General Plan was designed to avoid adjacency concerns with the City's MHPA. Nevertheless, if development did occur on undeveloped lands, the CAP Actions would not be expected to cause adverse edge effects in addition to those already associated with development. For these reasons, implementation of the CAP would result in a less-than-significant impact regarding adverse edge effects on the MHPA.

Threshold: Would the Project result in a conflict with any local policies or ordinances protecting biological resources?

Implementation of the CAP would not conflict with General Plan Conservation Element policies, the MSCP Subarea Plan, ESL ordinance, or Land Development Code Biology Guidelines. Therefore implementation of the CAP would not result in a conflict with any local policies or ordinances protecting biological resources.

Threshold: Would the Project introduce invasive species of plants into a natural open space area?

Implementation of CAP Actions would comply with the City's General Plan Conservation Element, which includes a policy that encourages the removal of invasive plant species and the planting of native plants near open space preserves. In addition, implementation of the CAP as a component of a specific project would be required to comply with MHPA Land Use Adjacency Guidelines for drainage, toxics, lighting, noise, barriers, invasive species and brush management, as identified in the MSCP Subarea Plan. For these reasons, implementation of the CAP would result in a less-than-significant impact regarding introduction of invasive species of plants into a natural open space area.

Geologic Conditions

Threshold: Would the Project expose people or structures to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards?

Southern California is considered one of the most seismically active regions in the United States, with numerous active faults and a history of destructive earthquakes. The entire San Diego region is susceptible to impacts from seismic activity, including earthquakes and ground-shaking events. The Actions included in the CAP are intended to reduce community-wide greenhouse gases (GHGs) by improving building efficiency, increasing renewable energy use, and improving multimodal transportation options, among other similar actions. Implementation of these strategies and actions would not directly affect the potential to expose people or structures to adverse effects resulting from geologic hazards such as earthquakes, landslides, mudslides, or ground failure.

Implementation of the CAP may include disclosing the energy efficiency of residential buildings (Action 1.1 Present to City Council for consideration a Residential Energy Conservation, Benchmarking, and Disclosure Ordinance), modification of transportation facilities such as re-timing traffic signals or installing roundabouts (Action 3.4 Implement a Traffic Signal Master Plan to retime traffic signals to reduce vehicle fuel consumption and Action 3.5 Implement a Roundabouts Master Plan to install roundabouts to reduce vehicle fuel consumption), and expansion of bicycle commuter amenities (Action 3.3 Implement the City of San Diego's Bicycle Master Plan to increase commuter bicycling opportunities). Projects implementing CAP Actions would be subject to all relevant federal, state, and local regulations and building standards, including the California Building Code (CBC) and the City's grading ordinance. Required conformance with the City's grading ordinance, and all seismic requirements that are outlined within the CBC, reduce the potential for hazards due to earthquakes. Therefore, implementation

of the CAP would not be expected to expose people or structures to potential substantial adverse effects involving earthquakes, and risks related to these hazards would be less than significant.

Slope failure results in landslides and mudslides from unstable soils or geologic units. Geologic hazards, including landslides, are regulated mainly by the CBC and the City's grading ordinance. The CBC requires special foundation engineering and investigation of soils on proposed development sites located in geologic hazard areas. All projects are required to adhere to California design standards and all standard design, grading, and construction practices to avoid or reduce geologic hazards. Implementation of the CAP as a component of a specific project would be required to conform to the City's grading ordinance and other local geologic hazard regulations, as well as all requirements outlined within the CBC, would reduce potential for hazards due to landslides. Therefore, implementation of the CAP would not be expected to expose people or structures to increased potential substantial adverse effects involving landslides, and risks associated with landslides would be less than significant.

Threshold: Would the Project result in a substantial increase in wind or water erosion of soils, either on or off the site?

High erosion potential in soils is primarily caused by loose soils and steep slopes. The potential for erosion generally increases as a result of the development of structures and impervious surfaces and the removal of vegetative cover. Implementation of the CAP as a component of a specific project would be subject to the City's grading ordinance, and other applicable regulations, including the National Pollutant Discharge Elimination System (NPDES) and the CBC, which contain policies to reduce erosion potential. Required conformance to the City's grading ordinance and other local geologic hazard regulations, as well as all regulatory requirements, would reduce potential for erosion and loss of topsoil, and result in a less-than-significant impact.

Construction of new infrastructure projects as part of CAP Actions have the potential for a short-term increase in wind or water erosion of soils; however, it is expected that adherence to existing standard best management practices (BMP) during construction would reduce these temporary impacts from wind or water erosion on soils to less than significant levels.

Threshold: Would the Project be located on a geologic unit or soil that is unstable or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Geologic hazards, including landslides, are regulated mainly by the CBC and the City's grading ordinance. Required conformance to the City's grading ordinance and other local geologic hazard regulations, as well as requirements included in the CBC, would reduce the potential for hazards due to unstable soil conditions. Therefore, implementation of CAP Actions as a component of a specific project would not be expected to result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse, and risks related to unstable soil conditions would be less than significant.

Health and Safety and Hazardous Materials

Threshold: Would the Project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including when wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Due to climate, topography, and native vegetation, the City of San Diego is subject to both wildland and urban fires. Current drought conditions in the State of California have both increased the risk of wildland fires due to dry conditions, and prompted the implementation of water conservation strategies. Implementation of CAP Actions is not likely to occur in areas where people or structures would be exposed to a significant risk of wildland fires, because they would primarily take place in urban and developed areas. Implementation of the CAP may include disclosing the energy efficiency of residential buildings (Action 1.1 Present to City Council for consideration a Residential Energy Conservation and Disclosure Ordinance), modification of transportation facilities such as re-timing traffic signals or installing roundabouts (Action 3.4 Implement a Traffic Signal Master Plan to retime traffic signals to reduce vehicle fuel consumption and Action 3.5 Implement a Roundabouts Master Plan to install roundabouts to reduce vehicle fuel consumption), and expansion of bicycle commuter amenities (Action 3.3 Implement the City of San Diego's Bicycle Master Plan to increase commuter bicycling opportunities). Projects implementing CAP Actions would not have an increased likeliness of exposing people or structures to urban fires including fires in areas where urbanized areas are adjacent to wildland areas. For these reasons, risks from exposure to wildland fires would be less than significant.

Action 2.1 of the CAP targets achievement of a 100 percent renewable supply of electricity by 2035 through consideration of a CCA or other program. Action 2.1 could result in the development of larger renewable energy systems (such as large-scale solar PV systems or biomass systems). Though facilities such as this could be located outside of existing urbanized areas, it is expected that they would be sited in industrial areas and near existing utility infrastructure within City limits, and therefore would not contribute to an increased risk of exposing people or structures to loss, injury, or death involving wildland fires, and the impact would be less than significant.

Outside of the City limits, development of large-scale renewable energy facilities may occur on private or public lands. Such developments could be developed in proximity to rural, open space areas with exposure to wildland fires. In such cases, it would be the responsibility of the agency with land use authority over the project site to ensure that such developments do not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. Therefore, conflicts either would not occur, or would be resolved by the local agency. In either case, it is anticipated that impacts associated with exposure to wildland fires would be identified and mitigated through the planning process for proposed facilities and would result in risks from exposure to wildland fires that are less than significant.

Threshold: Would the Project result in hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within a quarter-mile of an existing or proposed school?

Projects implementing CAP Actions could be located within one-quarter mile of a school. Implementation of the CAP would not change or alter the use of hazardous materials associated with these projects and would not increase the risk from hazardous materials. Construction activities associated with implementation of the CAP, for example, residential and commercial retrofits, intersection modifications, or facility improvements, could require temporary use of construction materials such as paints and solvents. To the extent that construction of future projects implementing the CAP would result in projects transporting or using hazardous materials, those projects would be required to comply with applicable federal, state, and local regulations related to hazardous materials, such as those administered by the U.S. Environmental Protection Agency; U.S. Department of Transportation; and County of San Diego Department of Environmental Health, Hazardous Materials Division.

Implementation of the CAP is not expected to increase exposure of the population to hazardous waste, and required compliance with federal and state regulations pertaining to hazardous wastes would minimize risks associated with hazardous emissions, and impacts regarding the handling or discovery of hazardous materials, substances, or waste within close proximity to a school would be less than significant.

Threshold: Would the Project impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The ongoing implementation and updating of the City of San Diego's Emergency Operations Plan allows for adequate response to emergencies as growth occurs, and reduces the potential for interference with emergency plans. Strategies and activities included in the CAP would not result in effects, such as an increase in traffic volumes that could impair implementation of an emergency response plan or emergency evacuation plan. Action 3.4 of the CAP entails implementation of a Traffic Signal Master Plan to retime traffic signals to reduce vehicle fuel consumption. It is anticipated that any traffic signal retiming would be incorporated within and comply with updates to the City's Emergency Operations Plan, and therefore would not interfere with an adopted emergency response plan or emergency evacuation plan.

Improvements to transportation infrastructure related to implementation of the CAP, such as modification of an intersection to install a roundabout, would be required to comply with City construction requirements. An approved Traffic Control Plan would be implemented during construction of any future project implementing the CAP which would allow emergency plans to operate. Therefore, implementation of the CAP would not physically interfere with an adopted emergency response plan or emergency evacuation plan, and the impact would be less than significant.

Threshold: Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or environment?

Implementation of CAP strategies and actions as a component of future projects would not change or alter the potential for location on a hazardous materials site, and would not be expected to increase risk of exposure to hazardous materials. If implementation of the CAP Actions as a component of a specific project is proposed on a hazardous materials site, remediation and cleanup to the appropriate standard would be required to comply with existing federal, state and local hazardous materials policies and regulations. For these reasons, the impact to the public or environment from location on a hazardous material site is less than significant.

Threshold: Would the Project expose people to toxic substances, such as pesticides and herbicides, some of which have long-lasting ability, applied to the soil during previous agricultural uses?

Implementation of the CAP as a component of a specific project would not change or alter the potential for exposure of the population to hazardous toxic substances such as pesticides and herbicides. Required compliance with federal, state and local regulations pertaining to hazardous wastes would minimize any risks, and therefore impacts regarding the risk of exposure to these toxic substances would be less than significant.

Threshold: Would the Project result in a safety hazard for people residing or working in a designated airport influence area?

The San Diego International Airport, Marine Corps Air Station Miramar, Brown Field Municipal Airport, and Montgomery Field Municipal Airport are located within the City. The Tijuana International Airport, Gillespie Field, Naval Air Station North Island, and Naval Outlying Field Imperial Beach are located adjacent to the City, but have the potential to affect land use and people within the City. To prevent incompatible uses in areas of higher aircraft hazard potential, the Airport Land Use Commission (ALUC), in compliance with State law, has prepared Airport Land Use Compatibility Plans (ALUCPs) for areas surrounding each airport with land use policies and criteria in the interest of public safety.

Implementation of CAP Actions as a component of future projects would not change or alter their compatibility with or proximity to a public airport. Any project proposed near an airport facility would be required to be compatible with the applicable ACLUP, and any applicable Federal Aviation Administration (FAA) regulations. For these reasons, implementation of CAP Actions would not introduce any new features that would result in a safety hazard for people residing in or working in a designated airport influence area, and impacts related to this risk would be less than significant.

Threshold: Would the Project result in a safety hazard for people residing or working within two miles of a private airstrip or a private airport or heliport facility that is not covered by an adopted Airport Land Use Compatibility Plan?

Implementation of CAP Actions as a component of future projects would not change or alter their compatibility with or proximity to a private airstrip, airport or heliport facility. Any project

proposed near such a facility would be required to be compatible with applicable Federal Aviation Administration (FAA) regulations. For these reasons, implementation of CAP Actions would not introduce any new features that would result in a safety hazard for people residing or living within two miles of a private airstrip or a private airport or heliport facility that is not covered by an adopted ALUCP, and impacts related to this risk would be less than significant.

Hydrology and Water Quality

The CAP includes Actions which promote the use of clean and renewable energy through encouraging use of mass transit, walking and bicycling by creating new and extended mass transit infrastructure and services, renovations, retrofits of existing sidewalks, cross-walks, pedestrian trails, and new bike lanes and facilities (Actions 3.1 through 3.6). The CAP also includes strategies to divert solid waste and capture methane from wastewater treatment facilities (Action 4.1 and 4.2). These actions would result in the construction of new or an expansion of existing waste processing and wastewater treatment facilities. These CAP Actions could result in both short-term construction and long-term operational impacts that could potentially affect hydrology and water quality resources. Water resources are protected by numerous federal, state and local jurisdictional laws, regulations, plans and ordinances. Compliance with water quality regulations and standards within the City of San Diego is achieved through conditions of required permits. Adherence to the City's Stormwater Standards Manual is considered to result less-than-significant impacts to hydrology and water quality. Projects that implement the CAP Actions would be subject to the required permits and adherence to the City's Stormwater Standards; therefore, implementation of the CAP would not be expected to violate applicable water quality regulations and standards.

Implementation of the CAP Actions described above would be subject to the City's Storm Water Standards Manual or later iteration of that document; however, projects that implement the CAP Actions would primarily take place in urban and developed areas and would not generally require new areas of ground disturbance. In some cases new infrastructure may be necessary, for example, for gas capture improvements at landfills or wastewater treatment plants (Action 4.2 Implement operational procedures to capture methane gas from wastewater treatment). It is anticipated that new infrastructure associated with implementation of Action 4.2, such as footings or a pipeline, would be located within the existing disturbed footprint of the facility and therefore would not generally require new ground disturbance.

Action 2.1 of the CAP targets achievement of a 100 percent renewable supply of electricity by 2035 through consideration of a CCA or other program. While the CAP does not propose to construct any site-specific renewable energy infrastructure projects, it could encourage the development of larger renewable energy systems (such as large-scale solar PV systems or biomass systems). Facilities such as this could be located outside of existing urbanized areas, but it is expected that they would be located in industrial areas and near existing utility infrastructure within the City's limits. These facilities would also be subject to the City's existing water quality regulations and standards, and therefore, the impacts to hydrology and water quality would be less than significant.

Development of these renewable facilities occurring outside the City's limits would be subject to review and approval by the agency with land use authority over the project site. The local jurisdiction would ensure that such developments are compatible with local, state and federal water quality regulations and standards. It is anticipated that any impacts on water quality resources would be identified and mitigated through the planning process for proposed facilities, and therefore, the impacts to hydrology and water quality would be less than significant.

Depending on the area of disturbance, implementation of certain measures or strategies in the CAP, such as the installation of bicycle amenities and facilities (Action 3.3 Implement the City of San Diego's Bicycle Master Plan to increase commuter bicycle opportunities), gas capture improvements at landfills or wastewater treatment plants (Action 4.1 Present to City Council for consideration a Zero Waste, and development of large scale renewable facilities would have to comply with either a Water Pollution Control Plan (WPCP) or Storm Water Pollution Prevention Plan (SWPPP). These plans would prevent or effectively minimize short-term water-quality impacts during construction activities. Additionally, projects that implement the CAP Actions would be subject to all Regional Water Quality Control Board regulations related to water quality protection. Therefore, implementation of the CAP would not violate existing water quality standards or discharge requirements, and a less-than-significant impact would result.

Threshold: Would the Project result in a substantial increase in impervious surfaces and associated increased runoff?

Implementation of CAP Actions is not likely to result in a substantial increase in impervious surfaces, because they would primarily take place in urban and developed areas. In fact, CAP Action 1.5 entails implementation of an Outdoor Landscaping Ordinance that requires use of weather-based irrigation controllers, which would have the positive effect of reducing runoff on existing impervious surfaces.

Implementation of the CAP would involve modification of transportation facilities (Action 3.5 Implement a Roundabouts Master Plan to install roundabouts to reduce vehicle fuel consumption) and expansion of infrastructure supporting alternative modes of transportation like bicycles (Action 3.3 Implement the City of San Diego's Bicycle Master Plan to increase commuter bicycle opportunities). The CAP also supports implementation of City plans and policies that are intended to achieve better walkability (Action 3.2 Implement the City of San Diego's Pedestrian Master Plan in Transit Priority Areas to increase commuter walking opportunities) and transit-supportive densities (Action 3.6 Implement transit-oriented development within Transit Priority Areas). The resulting intensification within selected urbanized areas is expected to reduce development pressures on vacant and undeveloped land and so would not contribute to an increase in impervious surfaces and associated increased runoff. It is anticipated that new infrastructure associated with implementation of CAP Actions, such as the modification of an existing intersection to install a roundabout, would be located primarily within the existing footprint of the facility and would not generally result in a substantial increase in impervious surfaces and associated runoff, therefore a less than significant impact would occur.

Threshold: Would the Project result in a substantial alteration to on- and off-site drainage patterns due to changes in runoff flow rates or volumes?

Implementation of CAP Actions would require minimal, if any, new areas of disturbance. Therefore, existing drainage patterns of a site would not be altered, nor would the amount of surface runoff be increased such that it would cause flooding. Implementation of CAP Actions as a component of future projects would not change or alter a future project's effect on drainage patterns. Therefore, implementation of the CAP would not substantially alter existing drainage patterns or increase amounts of surface runoff that could result in flooding, and a less-than-significant impact would occur.

Mineral Resources

Threshold: Would the Project result in the loss of availability of a significant mineral resource (e.g. sand or gravel) as identified the Open File Report 96-04, Update of Mineral Land Classification: Aggregate Materials in the Western San Diego County Production – Consumption Region, 1996, Department of Conservation, California Department of Geological Survey (located in the EAS library)?

The location of San Diego's high-quality mineral resource areas are designated within the General Plan as Mineral Resource Zone (MRZ)-2 areas. These are areas designated for the managed production of mineral resources. State law requires cities to plan for the beneficial management of these valuable mineral resources. Impacts on mineral resources occur when access to the resource is restricted or prohibited through development of lands containing the resource or when non-compatible land uses are developed in close proximity, thereby reducing the likelihood for extraction of those resources. Implementation of the CAP would not create new or modified land uses that would be incompatible with mineral access, as most CAP-related Actions would include modifications or improvements to existing structures or facilities. The CAP Actions are consistent with the General Plan and associated policies and plans, including those related to mineral resources in the Conservation Element. For these reasons, adoption of the CAP would not result in the loss of availability of a known mineral resource of value to the region and the state, and a less-than-significant impact would occur.

Noise

Threshold: Would the Project result or create a significant increase in the existing ambient noise levels?

Implementation of the CAP Actions would include retrofitting existing structures for energy efficiency, modification of transportation facilities such as re-timing traffic signals or installing roundabouts, and expansion of electric vehicle charging infrastructure and bicycle commuter amenities. These CAP components would typically not produce a new source of noise resulting in a permanent increase over ambient noise levels. However CAP Action 3.1, which entails implementation of the General Plan's Mobility Element and the City of Villages Strategy in Transit Priority Areas (TPAs) to increase the use of transit, could result in additional noise due to an increase in transit vehicles like buses in TPAs. The CAP has been prepared to be consistent with the

City's General Plan, and because the City of Villages Strategy is part of the General Plan, the impacts associated with planned transit improvements have been analyzed in the General Plan EIR. Therefore, Action 3.1 of the CAP will implement projects already included in the General Plan and the General Plan EIR, so no additional noise impacts are expected as a result of the CAP.

Implementation of the CAP Actions as a component of a specific project, or due to installation of new infrastructure such as intersection modifications, could result in temporary construction noise. The City of San Diego typically regulates noise associated with construction equipment and activities through enforcement of noise ordinance standards, implementation of General Plan policies, and imposition of conditions of approval for building or grading permits, so temporary noise impacts would be minimized.

Implementation of the CAP would be subject to existing City noise policies and regulations, and General Plan policies and programs, specifically those found in the Noise Element. Therefore, implementation of most actions included in the CAP would not create a permanent increase in ambient noise levels, and the impact would be less than significant. Action 3.1 could create a permanent increase in noise levels due to additional transit vehicles in TPAs, but these improvements are included in the General Plan City of Villages Strategy, and the impacts have been analyzed in the General Plan EIR.

CAP Action 2.1 could encourage the development of larger renewable energy systems (such as large-scale solar PV systems or biomass systems), within or outside the City's limits. Adherence to City noise policies and regulations during construction and operation of the facilities would serve to mitigate noise-related impacts. Development of these renewable facilities occurring outside the City's limits would be subject to review and approval by the agency with land use authority over the project site. The local jurisdiction would ensure that such developments adhere to local noise regulations and standards during construction and operation of the facilities. It is anticipated that any noise impacts would be identified and mitigated through the planning process for proposed facilities.

Threshold: Would the Project expose people to noise levels which exceed the City's adopted noise ordinance or are incompatible with Table K-4?

As stated above, implementation of the CAP as a component of a specific project would typically not produce a new permanent source of noise, and construction-related noise would be regulated through enforcement of applicable City noise policies, regulations and permits. As a result, implementation of the CAP would not expose people to noise levels which exceed the City's adopted noise ordinance or are incompatible with Table K-4, and the impact would be less than significant.

Threshold: Would the Project expose people to current or future transportation noise levels which exceed standards established in the Transportation Element of the General Plan or an adopted airport Comprehensive Land Use Plan?

Implementation of the CAP strategies and actions include a number of transportation-related improvements, including modification of transportation facilities such as re-timing traffic signals

or installing roundabouts, expansion of bicycle commuter amenities. The CAP also supports implementation of existing City plans and policies such as the Bicycle Master Plan, Pedestrian Master Plan, and goals and policies of the City's General Plan to achieve better walkability and transit-supportive densities. In general, because they support mass transit and switching from vehicles to active transportation (such as bicycles and walking), the transportation-related strategies and actions in the CAP would contribute to a reduction in future transportation noise levels, and a less-than-significant impact would occur.

Threshold: Would the Project result in land uses which are not compatible with aircraft noise levels as defined by an adopted airport Comprehensive Land Use Plan (CLUP)?

Permanent noise increases are not anticipated with implementation of the CAP, and only minor temporary increases would occur with project-specific construction activities that would be regulated by City codes and policies. If project work were to occur within an airport land use plan area or within two miles of a public airport, and if construction workers were to be exposed to airport noise, compliance with Occupational Safety and Health Administration (OSHA) standards for worker safety would minimize exposure to excessive noise levels. For these reasons, implementation of the CAP would be compatible with aircraft noise levels as defined by an adopted airport Comprehensive Land Use Plan, and any impact would be less than significant.

Paleontological Resources

Threshold: Would the Project require over 1,000 cubic yards of excavation in a high resource potential geologic deposit/formation/rock unit?

Implementation of the CAP Actions under CAP Strategy 1 (Water and Energy Efficient Buildings), Strategy 3 (Bicycling, Walking, Transit and Land Use), Strategy 4 (Zero Waste), and Strategy 5 (Climate Resiliency) would primarily include projects located in urban and developed areas, and would not generally require new ground disturbance that could impact a high or moderate resource potential geologic deposit. While some ground disturbing activity may result from work on existing structures during an energy efficiency retrofit, or installation of new infrastructure for gas capture improvements at landfills or wastewater treatment plants, it is anticipated that it would be located entirely within the existing disturbed footprint of the facility with no new areas of disturbance. Because no new areas of substantial ground disturbance are anticipated with implementation of these CAP Actions, implementation of the CAP is not expected to require over 1,000 cubic yards of excavation in a high resource potential geologic deposit, formation or rock unit, and the impact on paleontological resources or unique geologic features would be less than significant.

Action 2.1 of the CAP targets achievement of a 100 percent renewable supply of electricity by 2035 through consideration of a CCA or other program. While the CAP does not propose to construct any site-specific renewable energy infrastructure projects, it could encourage the development of larger renewable energy systems (such as large-scale solar PV systems or biomass systems) within and outside the City's limits. Development of these renewable facilities occurring outside the City's limits would be subject to review and approval by the agency with land use authority over the project site. It is anticipated that impacts to paleontological resources

that may occur during construction of facilities located within a high or moderate resource potential geologic deposit would be identified and mitigated through the planning process for proposed facilities.

Threshold: Would the Project require over 2,000 cubic yards of excavation in a moderate resource potential geologic deposit/formation/rock unit?

As stated above, it is not anticipated that substantial ground disturbance would result from implementation of most CAP actions. For the same reasons stated above, implementation of the CAP is not expected to require over 2,000 cubic yards of excavation in a medium resource potential geologic deposit, formation or rock unit, and the impact on paleontological resources or unique geologic features would be less than significant.

Public Services and Facilities

Threshold: Would the Project have an effect upon, or result in a need for new or altered governmental services in any of the following areas:

Police protection

Parks or other recreational facilities

Fire/Life Safety protection

Maintenance of public facilities, including roads

Libraries

Schools

Implementation of the CAP could include modification of existing City structures and facilities, improvements to intersection operations, an increase in use of mass transit options, and implementation of other similar energy-saving actions. These CAP-related project components would not generate new or increased demand for fire protection services, or interfere with or modify the ability of fire protection services to meet performance objectives or response times outlined in the General Plan. As a result, implementation of CAP strategies and actions as part of a new project would not change or alter the fire protection requirements associated with that project, and no impact would occur. For the same reasons, implementation of the CAP would not result in the need for new or expanded police protection facilities that could result in an environmental effect, and no impact would occur.

The CAP does not contain any strategies or actions that would increase school enrollment. Implementation of the CAP could modify school facilities to make them more energy efficient, but these retrofit projects would not change the capacity of schools or increase the enrollment. Implementation of CAP strategies and actions as a component of future projects would not change or alter the school enrollment demands associated with that project. For these reasons, implementation of the CAP would not result in the need for new or expanded school facilities that could result in environmental effects, and no impact would occur.

Implementation of the CAP as a component of a specific project would not change or alter the demand for park or recreation facilities. For this reason, adoption and implementation of the CAP would not result in the need for new or expanded park facilities that could result in environmental effects, and no impact would occur.

Implementation of the CAP would not increase the demand for libraries or other services to the extent that new facilities would be required, and would not result in an accelerated deterioration of facilities or need for new facilities. Implementation of CAP strategies and actions could result in public facilities modifications to make them more energy efficient, but these retrofit actions would not interfere with operation of public facilities or increase the use or deterioration of the facility. Implementation of the CAP as a component of a specific project would not change or alter the demand for public facilities associated with that project. For these reasons, implementation of the CAP would not result in the need for new or altered maintenance of public facilities, including roads, which could result in environmental effects, and no impact would occur.

B. Significant Unavoidable Impacts

Public Resources Code Section 21100(b) (2) and CEQA *Guidelines* Section 15126.2(b) require that any significant and unavoidable effect on the environment must be identified in an EIR. In addition, CEQA *Guidelines* Section 15093(a) allows the decision-making agency to determine if the benefits of a project outweigh the unavoidable adverse environmental impacts of implementing the project. The City can approve a project with unavoidable adverse impacts if it prepares and adopts a “Statement of Overriding Considerations” setting forth the specific reasons for making such a judgment.

The Project, if implemented, could result in significant adverse environmental impacts, as discussed in Chapter 3, Environmental Setting, Impacts, and Mitigation Measures. Mitigation measures proposed as part of the Project or added in this EIR would avoid or reduce most of the impacts to a less-than-significant level. After mitigation, the following impacts could remain significant, and should be considered an unavoidable consequence of the project:

Issue B.1: Visual Effects and Neighborhood Character: Implementation of the CAP could affect the visual quality of the planning area, particularly with respect to views from public viewing areas, vistas, or open spaces.

Issue B.2: Visual Effects and Neighborhood Character: Implementation of the CAP could introduce incompatible uses with surrounding development in terms of bulk, scale, materials, or style that would result in adverse visual impacts.

Issue C.2: Air Quality: Implementation of the CAP could result in air emissions that would substantially deteriorate ambient air quality, including the exposure of sensitive receptors to substantial pollutant concentrations.

Issue E.1: Historic Resources: Implementation of the CAP could cause a substantial adverse change in the significance of a historical resource, as defined in Section 15064.5, or have other physical or aesthetic effects to a prehistoric or historic building, structure, object or site.

Issue F.2: Transportation and Circulation: Implementation of the CAP could create substantial alterations to present circulation movements including effects on existing public access points and/or resulting from anticipated changes in transportation modes.

C. Significant Irreversible Environmental Changes

Public Resources Code Section 21100(b)(2) requires that an EIR include a discussion of significant irreversible environmental changes that would result from implementation of a project. CEQA *Guidelines* Section 15126.2(c) describes irreversible environmental changes as follows:

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

In addition, Public Resources Code Section 21100(b)(3) requires that lead agencies consider “measures to reduce the wasteful, inefficient, and unnecessary consumption of energy.” Appendix F of the CEQA *Guidelines* further states, “Potentially significant energy implications of a project shall be considered in an EIR to the extent relevant and applicable to the project.”

As discussed in Section 3.A Land Use, the CAP does not propose any changes to land use or zoning designations that would alter the population or job growth anticipated in the City’s General Plan such that there would be additional growth. The CAP quantifies the GHG reduction potential of Actions that implement the General Plan City of Villages strategy, and SANDAG Sustainable Communities Strategy (SCS), which both direct growth into compact, mixed-use, walkable centers linked by transit, thereby reducing vehicular travel. By reducing vehicle use and encouraging the use of alternative transportation modes, the CAP would reduce dependency on fossil fuels and associated GHG emissions.

The CAP encourages the construction of small- and large-scale renewable energy generation systems, which would require the use of energy and building materials during construction, but would result in a long-term reduction in energy consumption from the business-as-usual (BAU) scenario and a reduction in the use of nonrenewable energy sources. Operation and maintenance of the facilities may require the use of natural gas, electricity, and water resources; however, such use would be insignificant compared to the overall reduction in use of these resources that would result from CAP implementation. The CAP does not propose any development that would otherwise entail a significant use of energy resources.

Furthermore, a primary goal of the CAP is to reduce energy consumption throughout the City by increasing residential and municipal energy efficiency in existing buildings and reducing water consumption, which would reduce the City’s overall energy consumption. At the same time, the CAP anticipates that the City will supply the majority (up to 94 percent) of its energy needs with renewable energy sources, and would thereby eliminate the use of most nonrenewable energy sources by 2035. The CAP would not result in the inefficient, wasteful, and unnecessary consumption of energy or other resources, and therefore, no significant irreversible environmental changes would occur.

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CHAPTER 8

Alternatives

The purpose of this chapter is to describe and evaluate a reasonable range of alternatives to the proposed Project in order to inform the public and decision makers regarding the comparative merits of alternatives that might avoid or substantially lessen any of the Project's significant environmental effects.

A. CEQA Requirements

The California Environmental Quality Act (CEQA) requires that an EIR describe and evaluate a range of reasonable alternatives to the proposed project, or to the location of the proposed project, and evaluate the comparative merits of the alternatives (CEQA *Guidelines* Section 15126.6(a),(d)). The “range of alternatives” is governed by the “rule of reason,” which requires the EIR to set forth only those alternatives necessary to permit informed public participation and an informed and reasoned choice by the decision-making body (Section 15126.6(a),(f)).

The range of alternatives shall include alternatives that would feasibly attain most of the basic objectives of the project and would avoid or substantially lessen any of the significant effects of the project (Section 15126.6(a)-(c)). CEQA generally defines “feasible” to mean an alternative that is capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, technological, and legal factors. In addition, the following may be taken into consideration when assessing the feasibility of alternatives: site suitability; economic viability; availability of infrastructure; general plan consistency; other plans or regulatory limitations; jurisdictional boundaries; and the ability of the proponent to attain site control (Section 15126.6(f)(1)). If the lead agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion, and should include the reasons in the EIR (Section 15126.6(f)(2)(B)).

The description or evaluation of alternatives does not need to be exhaustive, and an EIR need not consider alternatives for which the effects cannot be reasonably determined and for which implementation is remote or speculative. An EIR need not describe or evaluate the environmental effects of alternatives in the same level of detail as the proposed project, but must include enough information to allow meaningful evaluation, analysis, and comparison with the proposed project (CEQA *Guidelines* Section 15126.6(d)).

The “No Project” alternative must be evaluated. This analysis shall discuss the existing conditions, as well as what could be reasonably expected to occur in the foreseeable future if the

project were not approved, based on current plans and consistent with available infrastructure and community services (Section 15126.6(e)(2)).

CEQA also requires that an environmentally superior alternative be selected from among the alternatives. The environmentally superior alternative is the alternative with the fewest or least severe adverse environmental impacts. When the “no project” alternative is the environmentally superior alternative, the EIR must also identify an environmentally superior alternative from among the other alternatives (Section 15126.6(e)(2)).

B. Factors in the Selection and Rejection of Alternatives

The CEQA *Guidelines* provide that an EIR should briefly describe the rationale for selecting the alternatives to be discussed, identify any alternatives that were considered by the lead agency but were rejected as infeasible, and briefly explain the reasons underlying the lead agency’s determination (CEQA *Guidelines* Section 15126.6(c)). The following factors were considered in identifying the reasonable range of alternatives analyzed in this PEIR:

- the extent to which the alternative would accomplish most of the basic goals and objectives of the proposed Project (shown in Chapter 2, Project Description);
- the extent to which the alternative would avoid or lessen any of the identified significant effects of the proposed Project;
- the feasibility of the alternative, taking into account suitability, economic viability, availability of infrastructure, and consistency with other applicable plans and regulatory limitations;
- the appropriateness of the alternative in contributing to a “reasonable range” of alternatives necessary to permit a reasoned choice; and
- the requirement of the CEQA *Guidelines* to consider a “No Project” alternative and to identify an “environmentally superior” alternative in addition to the No Project Alternative (Section 15126.6(e)).

C. Alternatives Eliminated from Consideration

CEQA *Guidelines* Section 15126.6(c) requires an EIR to identify and briefly discuss any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process. In identifying alternatives, primary consideration was given to alternatives that would reduce significant impacts while still meeting most of the Project objectives.

As the City of San Diego Climate Action Plan (CAP) is specifically intended to reduce greenhouse gas (GHG) emissions within the City, an alternative site would not be appropriate as an alternative to the proposed Project. Therefore, any off-site alternatives were rejected from further analysis in this PEIR because they do not meet the objectives, nor do they fulfill legal requirements under State law.

Because the CAP is intended to implement and supplement policies in the City of San Diego General Plan (2008) regarding GHG reduction and sustainability and not replace them, no alternative is considered that would alter General Plan policies regarding land use, including the City of Villages development strategy and the Mobility element.

The **Enhanced Sustainability Alternative** was analyzed in the Final Program Environmental Impact Report for the City's 2008 General Plan update (General Plan PEIR) as an alternative that would reduce the environmental effects of the General Plan related to energy and water consumption, solid waste generation, water quality and air quality. As described in the General Plan PEIR, this alternative would likely take several years to develop, including adoption of new or amended regulations and programs to implement the mandatory policies. Specifically, the Enhanced Sustainability Alternative would add mandatory policies to the General Plan to enhance the sustainability of future development within the plan area. Likely policies would include requirements for: builders/owners to employ sustainable building techniques (e.g., energy efficient design; landscaped "green" roofs; recycled building materials; renewable energy generation [e.g., solar panels]) in private developments; the installation of recycled water systems for large development projects; and reductions in water consumption associated with existing and future development in the plan area (e.g., landscaping associated with residential land uses, landscaping and fields within parks and open spaces, etc.).

The Enhanced Sustainability Alternative from the General Plan PEIR is similar to the CAP, as it would add the General Plan policies aimed at achieving more sustainable development. The Enhanced Sustainability Alternative was identified as the environmentally superior alternative in the General Plan PEIR. However, the City, by undertaking the CAP, has taken actions to reduce GHG emissions in an approach that incorporates the principals and environmental objectives of the Enhanced Sustainability Alternative. Since the Enhanced Sustainability Alternative does not differ substantially from the Project as proposed (i.e., the CAP), it would not add to the range of alternatives considered, and therefore is excluded from further analysis.

An **Environmental Justice Alternative** would gear CAP actions to environmental justice communities, including low income communities and communities of color. This alternative would emphasize: development of affordable housing within transit priority areas (TPAs); development of transit and other alternative transportation modes specifically to serve environmental justice communities; implementing CAP actions, such as energy and water conservation and tree planting, in environmental justice communities; and clear preference for siting facilities, including renewable energy facilities that emit air pollutants (such as biomass and other combustion facilities), and waste processing facilities in locations where they would not adversely affect environmental justice communities.

This alternative was rejected from further consideration because some actions are not under the jurisdiction of the City (development of transit and other alternative transportation modes specifically to service environmental justice communities), some actions are already incorporated into the General Plan, especially the Housing Element, (development of affordable housing within Transit Priority Areas), and some actions are already incorporated into the CAP (energy and water

conservation and tree planting would be citywide, and thus, in environmental justice communities). In addition, an Environmental Justice Alternative would not reduce any of the significant impacts to Visual Effects and Neighborhood Character, Air Quality, Historical Resources, or Transportation and Circulation. Therefore, this alternative's actions are not substantially different from the CAP, and thus, this alternative was rejected from further consideration.

D. Description of Alternatives Selected for Analysis

According to the CEQA *Guidelines*, the range of alternatives required is governed by the “rule of reason” that requires the PEIR to set forth only those feasible alternatives necessary to permit an informed and reasoned choice by the decision-making body and informed public participation. There are many potential CAP alternatives that could be considered for implementation by the City. Analysis of every possible alternative is infeasible and would be redundant. Furthermore, CEQA does not require that every alternative be considered. This section describes the reasonable range of alternatives that were developed by the City during the planning process for the PEIR. The following alternatives to the proposed Project were selected to be addressed in this PEIR:

- **No Project Alternative.** The No Project Alternative represents a continuation of the City's existing General Plan (adopted in 2008) without the adoption of the CAP.
- **The CMAP Alternative** is based on the City of San Diego's earlier efforts to develop a climate action plan, called the Climate Mitigation and Adaptation Plan (CMAP). The CMAP was drafted in 2012, but never adopted. This alternative consists of a somewhat different set of strategies and actions than the CAP.

No Project Alternative

Section 15126.6(e) of the CEQA *Guidelines* requires that an EIR evaluate and analyze the environmental impacts of the “No Project” Alternative, to examine and compare the potential environmental consequences associated with disapproving the Project. In this case, the No Project Alternative examines the scenario that would occur if the CAP is not adopted and implemented by the City. Under this scenario, the General Plan policies and programs would still be in effect, including the City of Villages development strategy and Mobility Element.

While the General Plan includes several policies related to climate change, it lacks the specificity of program development contained in the CAP. Under the No Project Alternative, strategies and actions that implement those policies would not be put into place. Actions aimed at facilitating and encouraging implementation of the City of Villages strategy, including Actions 3.1 and 3.6, would not occur. Therefore, it is likely that implementation of the City of Villages strategy and concentration of future development within TPAs may be slowed. There would not be development of a community choice aggregation program or similar program, so there would be less incentive for development of small scale and large scale renewable energy facilities, and a slower shift to renewable energy sources. Other actions that would increase building energy efficiency and water use would not be implemented, and efforts to reduce waste and increase recovery of methane from waste treatment would be less intensive and less coordinated.

Implementation of the Bicycle Master Plan and Pedestrian Master Plan, as well as the Urban Forestry Plan and the Recycled Water Master Plan, all of which have already been adopted by the City, would still occur. Other CAP actions, such as 3.4 Implement a Traffic Signal Master Plan and 3.5 Implement a Roundabouts Master Plan, would not occur. Overall, the No Project Alternative would result in fewer actions and measures to reduce GHG emissions, and less coordinated and presumably less effective implementation of the General Plan's goals and policies to address climate change.

Without the CAP, it is questionable whether the City would achieve its GHG reduction target of 49 percent below 2010 levels by the Year 2035. Under the No Project Alternative the City would still realize GHG emissions reductions from several high-impact state-wide measures included in the AB 32 Scoping Plan, but the gap in emissions reduction potential intended to be filled by the CAP would likely still exist.

CMAP Alternative

The CMAP was the initial GHG reduction plan considered by the City that provided policy direction and identified actions that the City and community could take to reduce GHG emissions consistent with AB 32. The City released a draft of the CMAP in August, 2012, but the plan was never adopted. This Alternative would adopt and implement the 2012 Draft CMAP instead of the CAP.

The CMAP Alternative establishes a planning horizon of 2013-2035; however, the CMAP did not contain specific implementing actions and corresponding reductions for meeting the post-2020 reduction goals. Also, due to the less-recently updated nature of the CMAP, it would not serve as a qualified GHG reduction plan under CEQA Guidelines Section 15183.5. that would account for emissions post-2020. ~~and~~ The CMAP Alternative includes the following: quantifies GHG emissions from community-at-large and City operations; establishes reduction targets for 2020, 2035 and 2050; identifies strategies and measures to reduce GHG levels, focusing on those that the City has authority to implement; and provides guidance for monitoring progress on an annual basis. In addition, the CMAP Alternative highlights climate change vulnerabilities, adaptation strategies, and recommendations for further research.

The CMAP Alternative, similar to the proposed Project, focuses on four categories of GHG sources and associated reduction strategies:

1. The Energy strategy aims to reduce GHG emissions by improving the energy efficiency of both new and existing residential and commercial buildings, increasing the use of distributed renewable and efficient energy production, and improving community wide understanding of energy management.
2. The Transportation strategy focuses on reducing emissions by reducing vehicle miles traveled (VMT) through multimodal transportation options, and by decreasing the energy intensity per miles travel by reducing idling and increasing electric vehicle use by improving the electric vehicle infrastructure.

3. The Land Use and Local Food System strategy would reduce emissions by supporting the City's General Plan, resulting in more compact, walkable, transit-accessible neighborhoods and by strengthening the regional food system, including expanding urban agricultural activities.
4. The Waste strategy would reduce emissions by diverting waste from landfills, and by supporting continual improvement in equipment and operation for wastewater treatment and landfill management.

As stated in the 2012 Draft CMAP, GHG reductions from actions undertaken pursuant to the plan would be 1.6 million metric tons (MT) of CO₂e by 2020, and 3.3 million MT by 2035.

E. Project Objectives

As stated in the first factor bulleted under 8.B above, the selection of alternatives must consider the basic goals and objectives of the Project. As previously presented in Chapter 2, Project Description, the Project objectives for the CAP include:

- Provide a roadmap to achieve GHG reductions;
- Conform to California laws and regulations;
- Implement the General Plan;
- Provide CEQA tiering for new development's GHG emissions;
- Create green jobs through incentive-based policies, such as the manufacturing and installation of solar panels;
- Improve public health by removing harmful pollutants from our air and improve water quality;
- Increase local control over the City's future by reducing dependence on imported water and energy;
- Enhance quality of life by supporting active transportation, planting trees and reducing landfill waste; and
- Save taxpayer' money by decreasing municipal water, waste and energy usage in city-owned buildings.

The ability of the Project and the two Alternatives to meet these objectives is discussed further, below.

F. Environmental Assessment

This section presents an environmental assessment of each alternative relative to the proposed Project, by environmental topic. As permitted by CEQA, the significant environmental effects of the alternatives are discussed in less detail than are the effects of the proposed Project (CEQA *Guidelines* Section 15126.6(d)). However, the analysis is conducted at a sufficient level of detail to provide the public and decision-makers with adequate information to fully evaluate the alternatives and to approve any of the alternatives without further environmental review.

Visual Effects and Neighborhood Character

As discussed in Section 3.B, the CAP as proposed could result in impacts to visual resources, but these would be mitigated to less than significant with specified mitigation measures. Significant visual impacts were identified for CAP Action 2.1 Community Choice Aggregation Program, since it could result in the development of large-scale renewable energy facilities within the City, which could be out of character with the surrounding neighborhood, or could adversely affect scenic views. The No Project Alternative does not include CAP Action 2.1, and so it would avoid this impact. The CMAP alternative does not anticipate development of large-scale renewable energy facilities, and so would also avoid this impact.

The General Plan PEIR identified as significant and unavoidable the potential for visual quality and neighborhood character conflicts associated with implementation of the City of Villages strategy. This impact would remain significant and unavoidable for the Project, as well as for the No Project Alternative and the CMAP Alternative, both of which would also implement the City of Villages strategy.

Air Quality

Section 3.C, Air Quality, states that the General Plan PEIR identifies potentially significant and unavoidable air quality impacts from emissions of particulate matter from construction activities and concentrated CO “hot spots” associated with implementation of the City of Villages strategy, and states that this impact would remain significant and unavoidable for the CAP. The same impact would potentially occur with each of the two alternatives, both of which would also implement the City of Villages strategy.

Section 3.C also identifies a potentially significant and unavoidable air quality impact from development of large-scale renewable energy, solid waste, water, and wastewater facilities. Because the No Project Alternative would not result in the development projects of this kind, it would not have associated impacts. The CMAP Alternative does not anticipate construction of large-scale renewable energy facilities within the City, and so would avoid project impacts associated with the development and operation of such facilities. The CMAP contains an aggressive waste reduction strategy, and so would likely have similar impacts related to increased solid waste collection and processing programs. The No Project Alternative does not include this action, and so would not have an impact of this kind.

Biological Resources

The proposed CAP and the two alternatives would all concentrate future growth within the urbanized area, and all would be required to comply with existing regulations for protection of biological resources. Therefore, impacts on biological resources would be less than significant for both alternatives, as well as for the Project as proposed.

Historical Resources

Section 3.E, Historical Resources, notes the potential for proposed CAP actions to impact historical resources, for example from building retrofits or installation of small-scale renewable energy systems, but states that adherence to existing regulations and policies intended to protect the integrity of these resources would avoid significant impacts. This would be true of both of the alternatives being examined, since the existing regulations and policies would be equally applicable and effective.

Section 3.E also notes that the General Plan PEIR identifies a significant and unavoidable impact from redevelopment that would occur from implementation of the City of Villages strategy, and that this impact would be carried over to the proposed CAP as well. The No Project Alternative and the CMAP Alternative would both also the potential for this impact as well, since they both would maintain and implement the City of Villages strategy. Therefore, the Project as proposed and both alternatives would have the same impacts on historical resources.

Paleontological Resources

Chapter 7, Other CEQA Considerations, examines the potential for the CAP to disturb paleontological resources, and concludes that while some proposed CAP actions may result in land disturbance, the extent of disturbance would generally be limited, and most disturbance would take place within already developed areas. Therefore, the impact on paleontological resources or unique geologic features would be less than significant.

The No Project Alternative would result in fewer actions involving construction and land disturbance, and so would have a somewhat lesser impact on paleontological resources. The CMAP Alternative does not anticipate development of large-scale renewable energy facilities, and so its impacts on these resources would be somewhat less than the Project as proposed.

Mineral Resources

Chapter 7, Other CEQA Considerations, examines the potential for the CAP to impact mineral resources, including the potential to result in new or modified land uses that would lead to the loss of availability of a known mineral resource of value to the region and the state, and concludes that no such potential exists. Neither the No Project Alternative nor the CMAP Alternative would be associated with changed land uses, and so neither alternative would have the potential for an impact of this kind.

Geology and Soils

Chapter 7, Other CEQA Considerations briefly discusses the potential for the proposed CAP to have an adverse impact related to geology and soils, and concludes that implementation of the CAP would not be expected to expose people or structures to potential substantial adverse effects involving earthquakes, mudslides, landslides, or other geologic hazards and therefore risks related to these hazards would be less than significant. Chapter 7 also concludes that existing regulations

would be sufficient to prevent significant erosion associated with construction that may take place pursuant to the CAP.

Both the No Project Alternative and the CMAP Alternative would involve redevelopment within the City with implementation of the City of Villages strategy, and this development would be subject to the same risks and the same regulatory protections. Therefore, both of the alternatives would have the same less than significant impacts as the Project with regard to geology and soils.

Greenhouse Gases

Section 3.D, Greenhouse Gases, concludes that one proposed CAP Action, Action 4.1 Divert Solid Waste and Capture Landfill Emissions, could result in significantly increased GHG emissions, because it would increase VMT by solid waste collection and long-haul vehicles; however, implementation of the CAP as a whole, including CAP Action 2.3, Conversion of Waste Collection Vehicles to Alternative Fuel, would result in a net decrease of GHG emissions. ~~Application of the specified mitigation measure would reduce this impact to less than significant.~~

The No Project Alternative does not include Action 4.1, and so would avoid this impact. The CMAP Alternative would include similar waste reduction strategies, and may therefore have a similar impact. However, the No Project Alternative would not include the CAP strategies and actions intended to implement the climate change policies contained in the General Plan, and would therefore result in inconsistency or conflict with policies and programs to reduce GHGs and address climate change. The No Project Alternative would thus have a significant impact related to GHGs.

The CMAP Alternative would implement local programs that would achieve a projected reduction of about 1.6 MMT of CO₂e below business as usual by 2020, and about 3.3 MMT by 2035. The Project as proposed is projected to achieve reductions of about 0.4 million MT of CO₂e by 2020, 1.3 MMT CO₂e by 2030, and about 2.5 3.5 MMT by 2035. However, the CAP projects much higher reductions from State and federal programs, such that the overall GHG reduction by 2035 is substantially higher than projected in the CMAP.

Health and Safety and Hazardous Materials

Chapter 7, Other CEQA Considerations discusses the potential for the CAP to result in increased risk or exposure of persons to hazardous situations and materials, including urban fires, wildland fires, the handling or discovery of hazardous substances within close proximity to a school, interference with an adopted emergency response plan or emergency evacuation plan, location of a project on a hazardous material site, safety hazards for people residing in or working in a designated airport influence area or proximity to a private airstrip or heliport. Chapter 7 concludes that the CAP would not have any significant impacts related to these issues.

Neither the No Project Alternative nor the CMAP Alternative would include any provisions that would increase health and safety risks or hazardous materials risks.

Hydrology and Water Quality

Chapter 7, Other CEQA Considerations includes a discussion of the potential for implementation of proposed CAP actions to adversely impact hydrology and water quality. The discussion focuses on the potential for construction projects to result in contaminated runoff entering waterways, and for new development to increase impervious surfaces and associated increased runoff or to substantially alter surface drainage patterns, and concludes that, with adherence to existing regulations, impacts would be less than significant. For the same reasons – that is, the limited area of disturbance or change and the effectiveness of existing regulations, both the No Project Alternative and the CMAP Alternative would also be expected to have less than significant impacts of this kind.

Water Supply

Section 3.H, Water Supply, discusses the potential for implementation of proposed CAP actions to result in a significant increase in the demand for water, and concludes that the CAP would not substantially increase demand and would not affect the ability of the City of San Diego or the San Diego County Water Authority's ability to provide water. The impacts associated with implementation of the CAP strategies and actions are therefore less than significant.

The CAP includes several actions to increase efficiency of water use and decrease water demand. Since these actions would not be implemented under the No Project Alternative, that alternative would have somewhat greater impacts than the CAP with regard to water supply; however, the concentrated development associated with the City of Villages strategy would also likely result in decreased water demand, and the General Plan PEIR concludes that implementation of the General Plan would not result in a significant impact on water supply.

The CMAP Alternative would include similar water efficiency actions as the CAP, and would not include any actions that would increase water demand; this alternative, therefore, would have the same beneficial impact on water supply as the CAP.

Land Use

As described in Section 3.A, Land Use, implementation of the CAP would generally be consistent with all applicable land use plans, policies, and regulations of agencies with jurisdiction over the Project, and would not conflict with any land use plans, including not conflicting with the environmental goals, objectives, or recommendations of the General Plan or affected community plans. However, Some projects undertaken pursuant to the CAP or in support of CAP programs, particularly the development of large-scale renewable energy facilities within the City limits, could conflict with existing land use and zoning designations or could conflict with adjacent land uses. With implementation of Mitigation Measure LU-1, potentially significant land use conflicts from siting of large-scale renewable energy facilities would be avoided, and after mitigation, this impact would be less than significant.

Neither the No Project Alternative nor the CMAP Alternative includes actions that would promote development of large-scale renewable energy projects within the City, and therefore the ~~significant~~ land use impact associated with the CAP would be avoided with both of these alternatives.

Noise

Chapter 7, Other CEQA Considerations, examines the potential for the CAP to result in significant noise impacts and concludes that, while implementation of the CAP actions could result in temporary construction noise, City noise regulations, enforcement of noise ordinance standards, implementation of General Plan policies, and imposition of conditions of approval for building or grading permits would minimize temporary construction noise impacts and render such impacts less than significant. Implementation of the City of Villages strategy, as facilitated by the CAP, could result in permanent increases in noise levels in some TPAs, due to more concentrated development and greater use of transit buses and trains. General Plan policies would generally avoid significant impacts, however.

For the same reasons – that is, the limited extent of construction projects and the effectiveness of existing regulations, both the No Project Alternative and the CMAP Alternative would also be expected to have less than significant impacts of this kind.

Public Services and Facilities

Chapter 7, Other CEQA Considerations examines whether the CAP would have an adverse effect upon, or result in a need for new or altered governmental services including police protection, parks and recreational facilities, fire/life safety protection, maintenance of public facilities, libraries, and schools. The discussion concludes that, because the CAP would not result in development or population growth beyond that anticipated and planned for in the General Plan, it would not have an impact on public services or facilities. For the same reason, both the No Project Alternative and the CMAP Alternative would have the same less than significant impacts.

Utilities

As described in Section 3.G, most of the proposed CAP actions would not result in a need for new utility systems, or require substantial alterations to existing infrastructure. However, the development of large-scale renewable energy facilities within the City limits, which may result from implementation of CAP Action 2.1; the implementation of the City of Villages strategy, which would be facilitated by implementation of CAP Actions 3.1 and 3.6; and the development of new or expanded waste diversion and gas capture/use facilities which may result with implementation of CAP Actions 4.1 and 4.2, could result in such effects. This could result in a significant impact to public utilities. The potential for implementation of the City of Villages strategy to cause significant impacts on public utilities as identified in the General Plan PEIR, would remain significant and unavoidable. However, because the City of Villages strategy is already City policy, and because it was already the subject of environmental review (the General Plan PEIR), potential impacts associated with implementation of the City of Villages strategy are not considered impacts of the CAP. Other utility-related impacts are found to be less than significant.

For the same reason, both the No Project Alternative and the CMAP Alternative would have the same less than significant ~~and unavoidable~~ impacts.

Transportation and Circulation

Section 3.F, Transportation and Circulation, concludes that, while proposed CAP actions including Action 3.4 Implement a Traffic Signal Master Plan and Action 3.5 Implement a Roundabouts Master Plan would improve traffic flow, the conclusion reached in the General Plan PEIR regarding the potential for significant unavoidable traffic impacts associated with implementation of the City of Villages strategy would remain. The No Project Alternative would not include Actions 3.4 and 3.5, so this impact would likely be more severe. The CMAP Alternative also includes actions to install roundabouts and time traffic lights, similar to the CAP.

Agricultural Resources

Chapter 7, Other CEQA Considerations, examines the potential for implementation of the CAP to result in significant impacts on agricultural resources. The discussion notes that most of the CAP strategies and actions include activities that would take place in urban and developed areas of the City, and as a result, these actions would not result in the conversion of farmland or conflict with existing zoning for agricultural use, or Williamson Act contract. Action 2.1 of the CAP could, however, encourage or facilitate the development of larger renewable energy systems including large-scale solar renewable energy facilities within or outside the City limits. It is anticipated that such facilities would be located in industrial areas, industrial brownfields, and near existing utility infrastructure. This would include areas designated in the General Plan for industrial uses, institutional, public, and semi-public facilities. Any such development outside of the City would be subject to local land use regulations and planning process, and additional environmental review. Therefore, impacts on agricultural resources would not be expected.

The No Project Alternative would not implement Action 2.1, and so would not encourage development of large-scale renewable energy facilities within or outside the City, thus avoiding the potential for effects on agricultural resources identified for the CAP. The CMAP does not contemplate development of large-scale renewable energy facilities within the City, and so would not be expected to have an adverse effect on Agricultural Resources.

G. Comparison of the Alternatives

The analysis of the alternatives is summarized and compared in two tables: **Table 8-1** provides a summary of the most severe impact level within each environmental topic area for each of the two alternatives and the Project as proposed (i.e., the CAP), and **Table 8-2** summarizes the ability of each alternative and the Project to meet the objectives of the CAP. The tables provide a ready means for the reader to review and compare the alternatives with each other, and with the CAP, as proposed.

**TABLE 8-1
ALTERNATIVES IMPACT SUMMARY AND COMPARISON**

Impact	Project	No Project	CMAP Alternative
Visual Effects and Neighborhood Character	Significant and Unavoidable	<u>Lesser Impact</u> Same Impact	<u>Lesser Impact</u> Same Impact
Air Quality	Significant and Unavoidable	<u>Lesser Impact</u> Same Impact	<u>Lesser Impact</u> Same Impact
Biological Resources	Less than Significant	Same Impact	Same Impact
Historical Resources	Significant and Unavoidable	Same Impact	Same Impact
Paleontological Resources	Less than Significant	Lesser Impact	Same Impact
Mineral Resources	Less than Significant	Same Impact	Same Impact
Geology and Soils	Less than Significant	Same Impact	Same Impact
Greenhouse Gases	Less than Significant with Mitigation	Greater Impact	<u>Same or</u> Greater Impact
Health and Safety and Hazardous Materials	Less than Significant	Same Impact	Same Impact
Hydrology and Water Quality	Less than Significant	Same Impact	Same Impact
Water Supply	Less than Significant	Greater Impact	Same Impact
Land Use	Less than Significant with Mitigation	No Impact	Lesser Impact
Noise	Less than Significant	Same Impact	Same Impact
Public Services and Facilities	Less than Significant	Same Impact	Same Impact
Utilities	<u>Less than Significant</u> Significant and Unavoidable	Same Impact	Same Impact
Transportation and Circulation	Significant and Unavoidable	Greater Impact	<u>Lesser Impact</u> Same Impact
Agricultural Resources	Less than Significant	Lesser Impact	Same Impact

**TABLE 8-2
ABILITY OF ALTERNATIVES TO SATISFY PROJECT OBJECTIVES**

Proposed Project Objective	CAP as Proposed	No Project Alternative	CMAP Alternative
Provide a roadmap to achieve GHG reductions	Meets Objective	Does Not Meet Objective	Meets Objective
Conform to California laws and regulations	Meets Objective	Does Not Meet Objective	Partially Meets Objective
Implement the 2008 General Plan	Meets Objective	Does Not Meet Objective	Meets Objective
Provide CEQA tiering for new development's GHG emissions	Meets Objective	Does Not Meet Objective	<u>Does not Meets</u> Objective
Create green jobs through incentive-based policies, such as the manufacturing and installation of solar panels	Meets Objective	Does Not Meet Objective	Meets Objective
Improve public health by removing harmful pollutants from our air and improve water quality	Meets Objective	Does Not Meet Objective	Meets Objective
Increase local control over the City's future by reducing dependence on imported water and energy	Meets Objective	Does Not Meet Objective	Meets Objective
Enhance quality of life by supporting active transportation, planting trees and reducing landfill waste	Meets Objective	Does Not Meet Objective	Meets Objective
Save taxpayer' money by decreasing municipal water, waste and energy usage in city-owned buildings	Meets Objective	Does Not Meet Objective	Meets Objective

Table 8-1 indicates that little difference in severity of impacts between the Project and the alternatives. The No Project Alternative would have an additional significant impact related to GHGs, since it would not implement the policies regarding reduction of GHGs contained in the General Plan, and would not meet any of the project objectives. The CMAP Alternative would have somewhat reduced impacts related to ~~land use~~, Land Use, Visual Effects and Neighborhood Character, Air Quality, and Transportation and Circulation because it does not include CAP Action 2.1, which could result in large scale renewable energy facilities, but would not be as effective as the CAP in reducing GHG emissions overall, and would not meet the project objective of providing adequate CEQA tiering for new development.

Table 8-2 indicates that the CAP, as proposed, has the ability to meet stated objectives. The CMAP Alternative also has the ability to meet, or partially meet, most Project objectives. The No Project Alternative would not meet Project objectives.

H. Environmentally Superior Alternative

Based upon the evaluation described in this section, ~~both the No Project Alternative and the CMAP Alternative would have greater~~ fewer impacts related to ~~GHGs~~ Land Use, Visual Effects and Neighborhood Character, Air Quality, and Transportation and Circulation than the proposed CAP. Therefore, the CMAP Alternative ~~Project as proposed~~ is considered the Environmentally Superior Alternative.

CHAPTER 9

Certification and Report Preparers

This document has been completed by the City's Environmental and Resources Analysis (E&RA) Division under the direction of the Planning Department and is based on independent analysis and determinations made pursuant to the San Diego Land Development Code Section 128.0103.

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CHAPTER 10

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CHAPTER 11

Mitigation Monitoring and Reporting Program

A. Introduction

This Mitigation Monitoring and Reporting Program is designed to ensure compliance with Public Resources Code Section 21081.6 during implementation of mitigation measures. This program identifies at a minimum: the department responsible for the monitoring, what is to be monitored, how the monitoring shall be accomplished, the monitoring and reporting schedule, and completion requirements. A record of the Mitigation Monitoring and Reporting Program will be maintained at the offices of the Entitlement Division, 1222 First Avenue, Fifth Floor, San Diego, CA, 92101. All mitigation measures contained in this Program Environmental Impact Report (PEIS) shall be made conditions of the project as may be further described below.

The proposed Project, i.e., the Climate Action Plan (CAP) is described in this PEIR. The PEIR focused on issues determined to be potentially significant by the City. The issues addressed in the PEIR include land use, visual effects and neighborhood character, air quality, greenhouse gas emissions, historical resources, transportation/circulation, public utilities, and water supply.

Public Resources Code Section 21081.6 requires monitoring of only those impacts identified as significant or potentially significant. After analysis, potentially significant impacts requiring mitigation were identified for land use, visual effects and neighborhood character, air quality, historical resources, and transportation/circulation.

The environmental analysis identified mitigation measures determined to be feasible that would reduce some or all of the potentially significant impacts to a less than significant level for the following issues: land use, visual effects and neighborhood character, air quality, and transportation/circulation however, impacts would not be fully reduced for ~~one~~ the following issue areas: Visual Effects and Neighborhood Character, Air Quality, Historical Resources, and Transportation and Circulation. ~~This~~ These impacts ~~is~~ are potentially significant and unavoidable.

B. Significant Impacts, Mitigation Measures, Monitoring and Reporting Requirements

Land Use

Impact: implementation of the CAP could conflict with applicable land use plans, policies or regulations of an agency with jurisdiction over the Project.

Mitigation Measure LU-1: Siting of Large-scale Renewable Energy Projects.

To ensure that large-scale renewable energy projects are compatible and not in conflict with existing land use and zoning designations, and that any such facilities do not result in conflicts with adjacent land uses, the City shall develop a set of siting guidelines for such facilities prior to permitting any large-scale renewable energy projects. The guidelines shall avoid land use conflicts and contain specific provisions for appropriate siting of large renewable energy facilities to include all of the following at a minimum:

- A definition of the type and scale of facility that is subject to the siting guidelines. This list may be revised from time to time, as new technologies emerge and evolve.
- A matrix table that shows, for each type of facility, the appropriate land use and zoning designations, where siting of facilities would not be expected to cause a significant land use conflict.
- Guidelines or best management practices for minimizing conflicts with neighboring land uses. These would include, but not be limited to, required and recommended siting criteria; general design guidelines (such as property line setbacks); minimizing construction and operational noise (such as adherence to Noise Ordinance standards and General Plan compatibility standards); minimizing electromagnetic frequency (EMF) exposure; ~~and~~ minimizing visual prominence (for example, by avoiding siting of facilities on ridgelines and other prominent topographical features, or by providing vegetative screens); and minimizing lighting and glare effects (such as adherence to the City's Outdoor Lighting Regulations).
- The requirement that a facility demonstrate that there are no sensitive biological resources present on-site that would be impacted by development of the proposed large-scale renewable energy facility, or demonstrate compliance with the MSCP Subarea Plan Section 1.4.3, Land Use Adjacency Guidelines, and with the City's ESL Regulations.
- The requirement that a facility demonstrate that there are no historical resources present on-site that would be impacted by development of the proposed large-scale renewable energy facility, or demonstrate compliance with Mitigation Framework HIST-1.
- A checklist to determine whether, even with adherence to the guidelines provided, a facility may still result in a land use conflict.

Visual Effects and Neighborhood Character

Impact: Implementation of the CAP could affect the visual quality of the planning area, particularly with respect to views from public viewing areas, vistas, or open spaces.

Mitigation: Implement **Mitigation Measure LU-1**.

Impact: Implementation of the CAP could introduce incompatible uses with surrounding development in terms of bulk, scale, materials, or style that would result in adverse visual impacts.

Mitigation: Implement **Mitigation Measure LU-1**.

Air Quality

Impact: Implementation of the CAP could result in air emissions that would substantially deteriorate ambient air quality, including the exposure of sensitive receptors to substantial pollutant concentrations.

Mitigation Measure AIR-1: Best Available Control Measures for Construction Emissions.

This mitigation measure incorporates the Mitigation Framework for construction-related air impacts contained in the General Plan PEIR, which states the following:

For projects that may exceed daily construction emissions established by the City of San Diego, Best Available Control Measures will be incorporated to reduce construction emissions to below daily emission standards established by the City of San Diego. Project proponents must prepare and implement a Construction Management Plan which includes but is not limited to Best Available Control Measures. Appropriate control measures will be determined on a project-by-project basis, and are specific to the pollutant for which the daily threshold may be exceeded. Control measures may include:

- Minimizing simultaneous operation of multiple construction equipment units;
- Use of low pollutant emitting equipment;
- Use of catalytic reduction for gasoline-powered equipment;
- Watering the construction area to minimize fugitive dust; and
- Minimizing idling time by construction vehicles.

Mitigation Measure AIR-2: Reduce Emissions from Expanded Recycling and Organics Collection Programs.

To ensure that increased VMT resulting from implementation of CAP Action 4.1 does not result in significant air emissions, collection vehicles shall be converted to alternative fuels, such as natural gas, during roll-out of the expanded program, such that combined emissions fall below the significance threshold for daily and annual NO_x emissions. This will be confirmed using generally accepted air emissions modeling, such as the CalEEMod model. In addition, to the extent that new programs increase VMT for long-haul vehicles, these

vehicles shall also be converted to alternative fuels, such as natural gas, such that any increase falls below the significance threshold for daily and annual NO_x emissions.

Historical Resources

Impact: Implementation of the CAP could cause a substantial adverse change in the significance of a historical resource, as defined in Section 15064.5, or have other physical or aesthetic effects to a prehistoric or historic building, structure, object or site.

Mitigation Measure HIST-1: Archaeological Resources.

Prior to issuance of any permit for a future development that could directly affect an archaeological resource, the City shall require the following steps be taken to determine: (1) the presence of archaeological resources and (2) the appropriate mitigation for any significant resources which may be impacted by a development activity. Sites may include, but are not limited to, residential and commercial properties, privies, trash pits, building foundations, and industrial features representing the contributions of people from diverse socio-economic and ethnic backgrounds. Sites may also include resources associated with prehistoric Native American activities.

Initial Determination

The likelihood for the project site to contain historical resources shall be determined by reviewing site photographs and existing historic information (e.g. Archaeological Sensitivity Maps, the Archaeological Map Book, and the City's "Historical Inventory of Important Architects, Structures, and People in San Diego") and conducting a site visit. If there is any evidence that the site contains archaeological resources, then a historic evaluation consistent with the City's Historical Resources Guidelines (City Guidelines) would be required. All individuals conducting any phase of the archaeological evaluation program must meet professional qualifications in accordance with the City Guidelines.

Step 1: Based on the results of the Initial Determination, if there is evidence that the site contains historical resources, preparation of a historic evaluation is required. The evaluation report would generally include background research, field survey, archeological testing and analysis. Before actual field reconnaissance would occur, background research is required which includes a record search at the SCIC at San Diego State University and the San Diego Museum of Man. A review of the Sacred Lands File maintained by the NAHC must also be conducted at this time. Information about existing archaeological collections shall also be obtained from the San Diego Archaeology Center and any tribal repositories or museums.

In addition to the record searches mentioned above, background information may include, but is not limited to: examining primary sources of historical information (e.g., deeds and wills), secondary sources (e.g., local histories and genealogies), Sanborn Fire Maps, and historic cartographic and aerial photograph sources; reviewing previous archeological research in similar areas, models that predict site distribution, and archeological, architectural, and historical site inventory files; and conducting informant interviews. The results of the background information shall be included in the evaluation report.

Once the background research is complete, a field reconnaissance must be conducted by individuals whose qualifications meet the standards outlined in the City Guidelines.

Consultants are encouraged to employ innovative survey techniques when conducting enhanced reconnaissance, including, but not limited to, remote sensing, ground penetrating radar, and other soil resistivity techniques as determined on a case-by-case basis. Native American participation is required for field surveys when there is likelihood that the project site contains prehistoric archaeological resources or traditional cultural properties. If through background research and field surveys historical resources are identified, then an evaluation of significance must be performed by a qualified archaeologist.

Step 2: Once a historical resource has been identified, a significance determination must be made. Tribal representatives and/or Native American monitors will be involved in making recommendations regarding the significance of prehistoric archaeological sites during this phase of the process. The testing program may require reevaluation of the proposed project in consultation with the Native American representative which could result in a combination of project redesign to avoid and/or preserve significant resources as well as mitigation in the form of data recovery and monitoring (as recommended by the qualified archaeologist and Native American representative). An archaeological testing program will be required which includes evaluating the horizontal and vertical dimensions of a site, the chronological placement, site function, artifact/ecofact density and variability, presence/absence of subsurface features, and research potential. A thorough discussion of testing methodologies, including surface and subsurface investigations, can be found in the City Guidelines.

The results from the testing program shall be evaluated against the Significance Thresholds found in the City Guidelines. If significant historical resources are identified within the Area of Potential Effect, the site may be eligible for local designation. At this time, the final testing report must be submitted to Historical Resources Board staff for eligibility determination and possible designation. An agreement on the appropriate form of mitigation is required prior to distribution of a draft environmental document. If no significant resources are found, and site conditions are such that there is no potential for further discoveries, then no further action is required. Resources found to be non-significant as a result of a survey and/or assessment will require no further work beyond documentation of the resources on the appropriate Department of Parks and Recreation (DPR) site forms and inclusion of results in the survey and/or assessment report. If no significant resources are found, but results of the initial evaluation and testing phase indicates there is still a potential for resources to be present in portions of the property that could not be tested, then mitigation monitoring is required.

Step 3: Preferred mitigation for historical resources is to avoid the resource through project redesign. If the resource cannot be entirely avoided, all prudent and feasible measures to minimize harm shall be taken. For archaeological resources where preservation is not an option, a Research Design and Data Recovery Program is required, which includes a Collections Management Plan for review and approval. The data recovery program shall be based on a written research design and is subject to the provisions as outlined in CEQA, Section 21083.2. The data recovery program must be reviewed and approved by the City's Environmental Analyst prior to draft CEQA document distribution. Archaeological monitoring may be required during building demolition and/or construction grading when significant resources are known or suspected to be present on a site, but cannot be recovered prior to grading due to obstructions such as, but not limited to, existing development or dense vegetation.

A Native American observer must be retained for all subsurface investigations, including geotechnical testing and other ground-disturbing activities, whenever a Native American Traditional Cultural Property or any archaeological site located on City property or within the Area of Potential Effect of a City project would be impacted. In the event that human remains are encountered during data recovery and/or a monitoring program, the provisions of Public Resources Code Section 5097 must be followed. In the event that human remains are discovered during project grading, work shall halt in that area and the procedures set forth in the California Public Resources Code (Section 50987.98) and State Health and Safety Code (Section 7050.5), and in the federal, state, and local regulations described above shall be undertaken. These provisions are outlined in the Mitigation Monitoring and Reporting Program (MMRP) included in the environmental document. The Native American monitor shall be consulted during the preparation of the written report, at which time they may express concerns about the treatment of sensitive resources. If the Native American community requests participation of an observer for subsurface investigations on private property, the request shall be honored.

Step 4: Archaeological Resource Management reports shall be prepared by qualified professionals as determined by the criteria set forth in Appendix B of the City Guidelines. The discipline shall be tailored to the resource under evaluation. In cases involving complex resources, such as traditional cultural properties, rural landscape districts, sites involving a combination of prehistoric and historic archaeology, or historic districts, a team of experts will be necessary for a complete evaluation.

Specific types of historical resource reports are required to document the methods (see Section III of the City Guidelines) used to determine the presence or absence of historical resources; to identify the potential impacts from proposed development and evaluate the significance of any identified historical resources; to document the appropriate curation of archaeological collections (e.g. collected materials and the associated records); in the case of potentially significant impacts to historical resources, to recommend appropriate mitigation measures that would reduce the impacts to below a level of significance; and to document the results of mitigation and monitoring programs, if required.

Archaeological Resource Management reports shall be prepared in conformance with the California Office of Historic Preservation "Archaeological Resource Management Reports: Recommended Contents and Format" (see Appendix C of the City Guidelines), which will be used by Environmental Analysis Section staff in the review of archaeological resource reports. Consultants must ensure that archaeological resource reports are prepared consistent with this checklist. This requirement will standardize the content and format of all archaeological technical reports submitted to the City. A confidential appendix must be submitted (under separate cover) along with historical resources reports for archaeological sites and traditional cultural properties containing the confidential resource maps and records search information gathered during the background study. In addition, a Collections Management Plan shall be prepared for projects which result in a substantial collection of artifacts and must address the management and research goals of the project and the types of materials to be collected and curated based on a sampling strategy that is acceptable to the City. Appendix D (Historical Resources Report Form) may be used when no archaeological resources were identified within the project boundaries.

Step 5: For Archaeological Resources: All cultural materials, including original maps, field notes, non-burial related artifacts, catalog information, and final reports recovered during

public and/or private development projects must be permanently curated with an appropriate institution, one which has the proper facilities and staffing for insuring research access to the collections consistent with state and federal standards. In the event that a prehistoric and/or historic deposit is encountered during construction monitoring, a Collections Management Plan would be required in accordance with the project MMRP. The disposition of human remains and burial related artifacts that cannot be avoided or are inadvertently discovered is governed by state (i.e., Assembly Bill 2641 and California Native American Graves Protection and Repatriation Act of 2001) and federal (i.e., Native American Graves Protection and Repatriation Act) law, and must be treated in a dignified and culturally appropriate manner with respect for the deceased individual(s) and their descendants. Any human bones and associated grave goods of Native American origin shall be turned over to the appropriate Native American group for repatriation.

Arrangements for long-term curation must be established between the applicant/property owner and the consultant prior to the initiation of the field reconnaissance, and must be included in the archaeological survey, testing, and/or data recovery report submitted to the City for review and approval. Curation must be accomplished in accordance with the California State Historic Resources Commission's Guidelines for the Curation of Archaeological Collection (dated May 7, 1993) and, if federal funding is involved, 36 Code of Federal Regulations 79 of the Federal Register. Additional information regarding curation is provided in Section II of the City Guidelines.

Transportation and Circulation

Impact: Implementation of the CAP could create substantial alterations to present circulation movements including effects on existing public access points and/or resulting from anticipated changes in transportation modes.

Mitigation Measure TR-1: The Roundabouts Master Plan shall include a monitoring and adaptive management program to evaluate, and if necessary, to correct, pedestrian safety issues at operating roundabouts.

Water Supply

Impact: Implementation of the CAP could result in the excessive use of water.

Mitigation Measure WS-1: Water Supply Assessment. In order to ensure that large-scale renewable energy projects do not use excessive amounts of water, a Water Supply Assessment (WSA) shall be submitted for review as part of the subsequent environmental review process. The WSA shall demonstrate that the proposed project would not demand an amount of water greater than the amount required by a 500 dwelling unit project.

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APPENDIX 1

Public Notice of Preparation (NOP)

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THE CITY OF SAN DIEGO

PLANNING DEPARTMENT

Date of Notice: February 18, 2015

**PUBLIC NOTICE OF PREPARATION
OF A DRAFT ENVIRONMENTAL IMPACT REPORT
AND**

PUBLIC NOTICE OF AN ENVIRONMENTAL IMPACT REPORT SCOPING MEETING

IO No.: 21002571

PUBLIC NOTICE: The CITY OF SAN DIEGO as the Lead Agency has determined that the project described below will require the preparation of a Program Environmental Impact Report (PEIR) in compliance with the California Environmental Quality Act (CEQA). This Notice of Preparation of a PEIR and Scoping Meeting was publicly noticed and distributed on February 18, 2015. This notice was published in the SAN DIEGO DAILY TRANSCRIPT and placed on the City of San Diego website at:

<http://www.sandiego.gov/city-clerk/officialdocs/notices/index.shtml>

SCOPING MEETING: A public scoping meeting will be held by the City of San Diego Planning Department on **Monday March 2, 2015**, from 5:00 PM to 7:00 PM at the Balboa Park Club, 2144 Pan American Road West, San Diego, CA 92101, (619) 235-1169. The scoping meeting will be held in the Santa Fe Room. **Please note that depending on the number of attendees, the meeting could end earlier than the time noted above.** Verbal and written comments regarding the scope and content of the proposed PEIR will be accepted at the meeting.

Written comments may also be sent to **Rebecca Malone, Associate Planner, City of San Diego Planning Department, 1222 First Avenue, MS 501, San Diego, CA 92101** or emailed to **DSDEAS@sandiego.gov** **referencing the Project Name and Number in the subject line.** Written comments must be received no later than 30 days after receipt of this notice. Responsible and Trustee agencies are requested to indicate their statutory responsibilities in connection with this project when responding. Upon completion of a draft PEIR, the City of San Diego will distribute the draft PEIR for public review and comment.

GENERAL PROJECT INFORMATION

PROJECT NAME: San Diego Climate Action Plan

SCH NO.: *Pending*

COMMUNITY AREA PLAN: All Community Plan Areas

COUNCIL DISTRICT: All Council Districts

SUBJECT: CITY COUNCIL APPROVAL for the adoption of the Climate Action Plan (CAP) and implementing regulations or policies, which may require amendments to the Municipal Code and/or Land Development Code. Former Governor Arnold Schwarzenegger's Executive Order S-3-05 established the 2050 statewide GHG reduction target of 80 percent below 1990 levels. The City of San Diego has prepared a draft CAP that identifies measures to effectively meet greenhouse gas (GHG) reduction targets for 2020 and 2035, as

“interim” targets for achieving the 2050 target. The CAP estimates the GHG emissions for the City of San Diego in the baseline year 2010 to be around 12.8 million metric tons of carbon dioxide equivalent (MMT CO₂e). By 2020 the CAP estimates the City’s emissions would increase to 13.9 MMT CO₂e, and to around 16.2 MMT CO₂e by 2035. With implementation of the CAP, the City aims to reduce emissions 15 percent below the 2010 baseline by 2020 to around 10.9 MMT CO₂e, and by a total of 49 percent by 2035 to 6.4 MMT CO₂e. With implementation of the CAP, it is anticipated that the City would exceed its reduction target by 0.9 MMT CO₂e in 2020 and 155,600 MT CO₂e in 2035. The CAP relies on significant City and regional actions, continued implementation of federal and state mandates, and five local strategies with associated action steps for target attainment. The five strategy areas are:

- Water & Energy Efficient Buildings;
- Clean & Renewable Energy;
- Bicycling, Walking, Transit & Land Use;
- Zero Waste; and
- Climate Resiliency.

Implementation of the CAP is divided into:

- Early Actions (Adoption of the CAP-December 31, 2017),
- Mid-Term Actions (January 1, 2018-December 31, 2020), and
- Longer-Term Actions (2021-2035).

Through 2020, the CAP meets the requirements set forth in CEQA Guidelines Section 15183.5, whereby a lead agency (e.g. the City of San Diego) may analyze and mitigate the significant effects of GHG emissions at a programmatic level, such as in a general plan, a long range development plan, or a separate plan to reduce GHG emissions. Following adoption of the CAP, eligible individual projects preparing project-specific environmental documents may tier from and/or incorporate by reference the CAP’s programmatic review of GHG impacts in their cumulative impacts analysis. The proposed CAP can be found at the following website:

<http://www.sandiego.gov/planning/genplan/cap/>

Applicant: City of San Diego

RECOMMENDED FINDING: Pursuant to Section 15060(d) of the CEQA Guidelines, it appears that the proposed project could potentially result in significant environmental impacts to the following areas: **Land Use, Visual Effects/Neighborhood Character, Air Quality, Greenhouse Gas Emissions, Historical Resources, Traffic/Circulation, Utilities, and Water Supply.**

AVAILABILITY IN ALTERNATIVE FORMAT: To request this Notice or the City’s letter to the applicant detailing the required scope of work (EIR Scoping Letter) in alternative format, call the Planning Department at (619) 235-5200 or (800) 735-2929 (TEXT TELEPHONE).

ADDITIONAL INFORMATION: For information on environmental review and/or information regarding this project, contact Rebecca Malone, Associate Planner, at (619) 446-5371. The Scoping Letter and supporting documents may be reviewed, or purchased for the cost of reproduction, at the Planning Department on the Fifth floor of the Development Services Center. For information regarding public meetings/hearings on this project, contact the Project Manager, Seth Litchney, Senior Planner, at (619) 446-6892. This notice was published in the SAN DIEGO DAILY TRANSCRIPT and distributed on February 18, 2015.

Tom Tomlinson, Interim Director
Planning Department

DISTRIBUTION: See Attached

DISTRIBUTION:

Federal Government

US Environmental Protection Agency (19)

US Fish and Wildlife Service (23)

State of California

Caltrans, District 11 (31)

California Department of Fish and Wildlife (32)

California Natural Resources Agency (43)

Regional Water Quality Control Board: Region 9 (44)

Department of Water Resources (45)

State Clearinghouse (46)

California Coastal Commission (48)

State Water Resources Control Board (55)

Native American Heritage Commission (56)

Office of Planning and Research (57)

County of San Diego

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Department of Planning and Land Use (68)

County Water Authority (73)

Department of Environmental Health (75)

City of San Diego

Mayor's Office (91)

Council President Lightner, District 1

Councilmember Zapf, District 2

Councilmember Gloria, District 3

Councilmember Cole, District 4

Councilmember Kersey, District 5

Councilmember Cate, District 6

Councilmember Sherman, District 7

Councilmember Alvarez, District 8

Council President Pro Tem Emerald, District 9

City Attorney's Office (MS 59)

Planning Department

Tom Tomlinson, Interim Director

Nancy Bragado, Deputy Director

Brian Schoenfisch, Program Manager

Rebecca Malone, Associate Environmental Planner

Myra Herrmann, Senior Environmental Planner

Seth Litchney, Senior Planner

Cathy Winterrowd

Development Services Department

Kerry Santoro, Deputy Director
Martha Blake, Senior Planner
Anna McPherson, Senior Planner
Elizabeth Shearer-Nguyen, Senior Planner
Jeff Szymanski, Senior Planner

Public Utilities Department

Nicole McGinnis

Public Works Department

Carrie Purcell

Environmental Services Department

Lisa Wood

Libraries

Library Department—Gov. Documents (81)
Central Library (81A)
Balboa Branch (81B)
Beckwourth Branch (81C)
Benjamin Branch (81D)
Carmel Mountain Ranch Branch (81E)
Carmel Valley Ranch Branch (81F)
City Heights/Weingart Branch (81G)
Clairemont Branch (81H)
College-Rolando Branch (81I)
Kensington-Normal Heights Branch (81K)
La Jolla/Riford Branch (81L)
Linda Vista Branch (81M)
Logan Heights Branch (81N)
Malcolm X Library and Performing Arts Center (81O)
Mira Mesa Branch (81P)
Mission Hills Branch (81Q)
Mission Valley Branch (81R)
North Clairemont Branch (81S)
North Park Branch (81T)
Oak Park Branch (81U)
Ocean Beach Branch (81V)
Otay Mesa-Nestor Branch (81W)
Pacific Beach/Taylor Branch (81X)
Paradise Hills Branch (81Y)
Point Loma/Hervey Branch (81Z)
Rancho Bernardo Branch (81AA)
Rancho Penasquitos Branch (81BB)
San Carlos Branch (81DD)
San Ysidro Branch (81EE)
Scripps Miramar Ranch Branch (81FF)
Serra Mesa Branch (81GG)
Skyline Hills Branch (81HH)

Tierrasanta Branch (81II)
University Community Branch (81JJ)
North University Branch (81JJJ)
University Heights Branch (81K)
Malcolm A Love Library (457)

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City of Coronado (95)
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City of El Cajon (97)
City of Escondido (98)
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City of La Mesa (100)
City of Lemon Grove (101)
City of National City (102)
City of Poway (103)
City of Santee (104)
City of Solana Beach (105)
San Diego Association of Governments (108)
San Diego Unified Port District (109)
San Diego County Regional Airport Authority (110)
Metropolitan Transit System (112/115)
San Diego Gas & Electric (114)
San Dieguito River Park JPA (116)

Other Interested Agencies, Organizations, and Individuals

Community Groups, Associations, Boards, and Committees

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Black Mountain Ranch-Subara I (226C)
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Otay Mesa Planning Committee (235)
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Greater Golden Hill Planning Committee (259)
Serra Mesa Planning Committee (263A)
Kearney Mesa Community Planning Group (265)
Linda Vista Community Planning Committee (267)
La Jolla Community Planning Association (275)
City Heights Area Planning Committee (287)
Kensington-Talmadge Planning Committee (290)
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Eastern Area Planning Committee (302)
North Bay Community Planning Committee (307)
Mira Mesa Community Planning Committee (310)
Mission Beach Precise Planning Board (325)

Navajo Community Planners, Inc. (336)
Carmel Valley Community Planning Board (350)
Del Mar Mesa Community Planning Board (361)
North Park Planning Committee (363)
Ocean Beach Planning Board (367)
Old Town Community Planning Board (368)
Pacific Beach Community Planning Committee (375)
Pacific Highlands Ranch-Subarea III (377A)
Rancho Penasquitos Planning Board (380)
Peninsula Community Planning Board (390)
Rancho Bernardo Community Planning Board (400)
Sabre Springs Community Planning Group (406B)
San Pasqual-Lake Hodges Planning Group (426)
San Ysidro Planning and Development Group (433)
Scripps Miramar Ranch Planning Group (437)
Miramar Ranch North Planning Committee (439)
Skyline Paradise Hills Planning Committee (443)
Torrey Hills Community Planning Board (444A)
Southeastern San Diego Planning Committee (449)
Encanto Neighborhoods Community Planning Group (449A)
College Area Community Planning Board (456)
Tierrasanta Community Council (462)
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Torrey Pines Community Planning Board (469)
University City Community Planning Group (480)
Uptown Planners (498)

Town/Community Councils

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Barrio Station, Inc. (241)
Downtown Community Council (243)
Harborview Community Council (245)
Clairemont Town Council (257)
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Mission Valley Community Council (328C)
San Carlos Area Council (338)
Carmel Mountain Ranch Community Council (344)
Ocean Beach Town Council, Inc. (367A)
Pacific Beach Town Council (374)
Rancho Penasquitos Town Council (383)
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City of San Diego Sustainable Energy Advisory Board
The Beach and Bay Beacon News (137)
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San Diego Canyonlands (165A)
San Diego Natural History Museum (166)
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League of Women Voters (192)
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San Diego Historical Society (211)
San Diego Archaeological Center (212)
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Ron Chrisman (215)
Clint Linton (215B)
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 Campo Band of Mission Indians (225B)
 Ewiiapaayp Band of Mission Indians (225C)
 Inaja Band of Mission Indians (225D)
 Jamul Indian Village (225E)
 La Posta Band of Mission Indians (225F)
 Manzanita Band of Mission Indians (225G)
 Sycuan Band of Mission Indians (225H)
 Viejas Group of Capitan Grande Band of Mission Indians (225I)
 Mesa Grande Band of Mission Indians (225J)
 San Pasqual Band of Mission Indians (225K)
 Ipai Nation of Santa Ysabel (225L)

La Jolla Band of Mission Indians (225M)
Pala Band of Mission Indians (225N)
Pauma Band of Mission Indians (225O)
Pechanga Band of Mission Indians (225P)
Rincon Band of Luiseno Indians (225Q)
San Luis Rey Band of Luiseno Indians (225R)
Los Coyotes Band of Mission Indians (225S)
San Diego Apartment Association
Building Owners and Managers Association
San Diego Association of Realtors
Industrial Environmental Association
NAIOP San Diego
Urban Land Institute
American Institute of Architects, San Diego Chapter
Coastal and Estuarine Research Federation
The Nature Conservancy
Walk San Diego
Bike San Diego
Community Forest Advisory Board
Green Edge Technology
San Diego 350
Diane Coombs
Landry Watson
Nicole Capretz
Nicola Hedge
Doug Smith
Bill Powers
Elyse Lowe
Angie Mei
Dr. D. Bart Chadwick
Joan Raphael
Masada Disenhouse
Angela Deegan
Grace Van Thillo
Janina Moretti
Philip Petrie
Lyla Fadali
Mike Bullock

APPENDIX 2

NOP Scoping Letter

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THE CITY OF SAN DIEGO

February 18, 2015

SUBJECT: Scope of Work for a Draft Program Environmental Impact Report for the City of San Diego Climate Action Plan ("Project"). SCH No. *Pending*

Pursuant to Section 15060(d) of the California Environmental Quality Act (CEQA), the Environmental and Resource Analysis (E&RA) Division of the City of San Diego Planning Department has determined that the proposed project, referenced above, may have significant effects on the environment, and the preparation of an Environmental Impact Report (EIR) is required. Staff has determined that a Program EIR (PEIR) is the appropriate environmental document for this project because the Climate Action Plan can be characterized as one large program that governs the interconnected and continued climate related planning of the entire City.

The purpose of this letter is to identify the specific issues to be addressed in the PEIR. The PEIR shall be consistent with CEQA Guidelines Section 15168 and will focus on key environmental issue areas, and will incorporate by reference the 2008 General Plan EIR, consistent with CEQA Guidelines Section 15150, as appropriate. The PEIR will demonstrate consistency of the CAP with CEQA Guidelines Section 15183.5 related to tiering and streamlining GHG emissions analysis at the subsequent project level, and adequacy of the use of the CAP as a "qualified GHG reduction plan."

The PEIR should be prepared in accordance with the *City of San Diego Technical Report and Environmental Impact Report Guidelines* (Updated May 2005). A Notice of Preparation (NOP) is being distributed concurrently to Trustee and Responsible Agencies and others who may have an interest in the project in accordance with CEQA Section 21083.9(a)(2) for projects of statewide, regional, or area-wide environmental impacts. A Scoping Meeting has been scheduled for March 2, 2015. Changes or additions to the scope of work may be required as a result of input received in response to the Scoping Meetings and NOP. Furthermore, should the project scope be modified during the scoping stage or PEIR review process and/or by the applicant, these changes shall be disclosed in the PEIR under the section "History of Project Changes" and be accounted for in the PEIR impacts analysis to the extent required by CEQA.

Each section and issue area of the PEIR shall provide a descriptive analysis of the project followed by a comprehensive evaluation. The PEIR shall also include sufficient graphics and tables, which in conjunction with the relevant narrative discussions, provide a complete and meaningful description of all major project features, the environmental impacts of the project, as well as cumulative impacts, mitigation of significant impacts, and alternatives to the project.

Project Location: The Climate Action Plan encompasses the entire City of San Diego.

SUBJECT: CITY COUNCIL APPROVAL for the adoption of the Climate Action Plan and implementing regulations or policies, which may require amendments to the Municipal Code and/or the Land Development Code. Former Governor Arnold Schwarzenegger’s Executive Order S-3-05 established the 2050 statewide GHG reduction target of 80 percent below 1990 levels. The City of San Diego has prepared a draft Climate Action Plan (CAP) that identifies measures to effectively meet greenhouse gas (GHG) reduction targets for 2020 and 2035, as “interim” targets for achieving the 2050 target.

The CAP estimates the GHG emissions for the City of San Diego in the baseline year 2010 to be around 12.8 million metric tons of carbon dioxide equivalent¹ (MMT CO₂e). By 2020 the CAP estimates the City’s emissions would increase to 13.9 MMT CO₂e, and to around 16.2 MMT CO₂e by 2035. With implementation of the CAP, the City aims to reduce emissions 15 percent below the 2010 baseline by 2020 to around 10.9 MMT CO₂e, and by a total of 49 percent by 2035 to 6.4 MMT CO₂e. With implementation of the CAP, it is anticipated that the City would exceed its reduction target by 0.9 MMT CO₂e in 2020 and 155,600 MT CO₂e in 2035. Additional analysis may be conducted to determine projected emissions level reductions, and the PEIR will reflect the updated information.

The CAP relies on significant City and regional actions, continued implementation of federal and state mandates, and local actions for target attainment. The CAP is focused around five primary strategies, implemented by 20 action steps that include new ordinances, City Council policies, resolutions, programs, incentives, and outreach and education activities. The five CAP strategies and associated action items are as follows:

- **Strategy 1: Water & Energy Efficient Buildings**
 - 1.1 Nonresidential Energy Conservation, Disclosure and Benchmarking Ordinance
 - 1.2 Residential Energy Conservation, Disclosure and Benchmarking Ordinance
 - 1.3 City of San Diego’s Municipal Energy Strategy and Implementation Plan
 - 1.4 New Water Rate and Billing Structure
 - 1.5 Water Conservation, Disclosure and Benchmarking Ordinance
 - 1.6 Outdoor Landscaping Ordinance
- **Strategy 2: Clean & Renewable Energy**
 - 2.1 Community Choice Aggregation Program or Similar Program
 - 2.2 Conduit for solar photovoltaic systems (PV) and electric vehicles (EV), and Plumbing for Solar Water Heating
- **Strategy 3: Bicycling, Walking, Transit & Land Use**
 - 3.1 Mass Transit
 - 3.2 Commuter Walking

¹ Carbon dioxide equivalent is a metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential (GWP).

- 3.3 Commuter Bicycling
- 3.4 Retiming Traffic Signals
- 3.5 Install Roundabouts
- 3.6 Municipal Zero Emissions Vehicles
- 3.7 Convert Municipal Waste Collection Trucks to Low Emission Fuel
- 3.8 Electric Vehicle Charging Infrastructure
- 3.9 Reduction in Average Commute
- **Strategy 4: Zero Waste**
 - 4.1 Divert Solid Waste and Capture Landfill Emissions
 - 4.2 Capture Methane from Wastewater Treatment
- **Strategy 5: Climate Resiliency**
 - 5.1 Urban Tree Planting Program

Additional supporting actions include regional efforts undertaken by the San Diego Association of Governments (SANDAG), pursuant to Senate Bill 375, the Renewable Portfolio Standard, California Solar Programs, Vehicle Efficiency Standards (Pavley 1 and CAFE), Low Carbon Fuel Standard, California Air Resources Board (CARB) Tire Pressure Program, and the CARB Heavy Duty Vehicle Aerodynamics Program.

Implementation of the CAP is divided into three separate phases.

- **Phase 1: Early Actions** (Adoption of the CAP-December 31, 2017) – High Priority with large emissions reductions that lay the foundation for longer-term actions.
- **Phase 2: Mid-Term Actions** (January 1, 2018-December 31, 2020) – Actions specifically focused on helping the City reach its 2020 GHG Emissions Reduction Target.
- **Phase 3: Longer-Term Actions** (2021-2035) – Actions focused on helping the City reach its 2035 GHG Emissions Reduction Target.

The CAP also discusses the social equity benefits and potential for job creation that would be associated with CAP implementation and reducing greenhouse gas emissions, and the need for the City to plan for climate change adaptation in the near future.

Through 2020, the CAP meets the requirements set forth in CEQA Guidelines section 15183.5, whereby a lead agency (e.g. the City of San Diego) may analyze and mitigate the significant effects of GHG emissions at a programmatic level, such as in a general plan, a long range development plan, or a separate plan to reduce GHG emissions. Following adoption of the CAP, eligible individual projects preparing project-specific environmental documents may tier from and/or incorporate by reference the CAP's programmatic review of GHG impacts in their cumulative impacts analysis.

The proposed CAP can be found at the following website:

<http://www.sandiego.gov/planning/genplan/cap/>

PROJECTS WITHIN THE SCOPE OF THE PEIR

Another purpose of this or any other PEIR is to streamline future environmental review of projects found to fall within the scope of the PEIR. The PEIR for this Project will address and evaluate the Climate Action Plan at a general programmatic level. The PEIR is not intended or structured to evaluate project level impacts although the PEIR may provide information and analyses that could be used in conjunction with future project-level environmental reviews. Project level impacts of subsequent activities are subject to additional environmental review in accordance with CEQA.

Pursuant to the CEQA Guidelines (Section 15168), a PEIR allows the lead agency to consider broad policy alternatives and program-wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts, and allow reduction in paperwork. In addition, it may be used with the intent of streamlining and limiting the later environmental review required for projects that implement the components of the Program.

PEIR FORMAT AND CONTENT

The PEIR serves to inform governmental agencies and the public of a project's environmental impacts. Emphasis on the PEIR must be on identifying feasible solutions to environmental problems. The objective is not simply to describe and document an impact, but to actively create and suggest mitigation measures or project alternatives that would avoid or substantially reduce the significant adverse environmental impacts. The adequacy of the PEIR will depend greatly on the thoroughness of this effort. The PEIR must be written in an objective, clear and concise manner, and must meet the requirements of CEQA. Wherever possible, use graphics to replace extensive word descriptions and to assist in clarification. Conclusions must be supported by substantial evidence presented in the PEIR or otherwise contained in the administrative record, with quantitative, as well as qualitative information to the extent practicable.

Prior to distribution of the Draft PEIR (DPEIR), Conclusions will be attached to the front of the DPEIR. The Conclusions cannot be prepared until a DPEIR has been submitted and accepted for release by the City. The DPEIR shall include a Title Page which includes the Project Number, State Clearinghouse Number (SCH No.) and the date of publication and an Executive Summary, reflecting the DPEIR outline for each issue area identified below in Section V, but need not contain every element of the DPEIR. Additional information regarding specific content and formatting of the DPEIR can be found in the City's *Environmental Impact Report Guidelines (updated December 2005)* as outlined below.

I. PEIR REQUIREMENTS

Each section and discussion area of the PEIR must provide a descriptive analysis of the project followed by an objective and comprehensive evaluation. The Draft PEIR must also include sufficient graphics and tables to provide a complete description. Please refer to the Environmental Impact Report Guidelines, updated May 2005, for additional details regarding the required information.

A. Introduction

Introduce the project with a detailed discussion of the intended use and purpose of the PEIR. Briefly describe the project and the necessity for any subsequent discretionary actions anticipated by the City and any other local, state, and/or federal approvals. Discuss how the PEIR may be used as the basis for environmental review of subsequent development approvals and/or environmental documents. Describe the parameters for the future use of the PEIR.

B. Environmental Setting

The PEIR should (i) describe the general location of the CAP planning area and present it on a topographic map and regional map; (ii) provide a local and regional description of the environmental setting of the project, as well as the zoning and land use designations of the affected areas, plan area topography, drainage characteristics and vegetation in the plan area; and (iii) include any applicable land use plans/overlay zones that would be affected by the CAP, such as the City of San Diego Multiple Species Conservation Program (MSCP) Subarea Plan and associated Multi-Habitat Planning Area (MHPA).

C. Project Description

The PEIR should include a detailed discussion of the goals and objectives of the CAP. Project objectives will be critical in determining the appropriate alternatives for the project, which would avoid or substantially reduce potentially significant impacts. This section of the document should include a discussion of all discretionary actions required for project approval and implementation, including but not limited to a description of all permits and approvals required by local, state, and federal regulatory agencies.

II. HISTORY OF PROJECT CHANGES

This section of the PEIR shall outline the history of the project and any material changes that have been made to the proposed project in response to environmental concerns raised during public and agency review of the project (i.e., in response to NOP or public scoping meetings or during the public review period for the Draft PEIR).

III. ENVIRONMENTAL ISSUES

The potential for significant environmental impacts must be thoroughly analyzed and mitigation measures identified that would avoid or substantially lessen any such significant impacts. Below are key environmental issue areas that have been identified for this project, within which the issue statements must be addressed individually. Discussion of each issue statement should include an explanation of the existing conditions, impact analysis, significance determination, and appropriate mitigation. The impact analysis should address potential direct, indirect, and cumulative impacts that could be created through implementation of the proposed project and its alternatives. The environmental issues analysis will tier off the General Plan EIR, where appropriate, and will incorporate the General Plan EIR by reference.

LAND USE

- Issue 1: Would the proposed project conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project? Applicable plans and policies may include the City of San Diego General Plan, Community Plans, the 2030 SANDAG Regional Transportation Plan, Local Coastal Program (LCP) plans, and the Airport Land Use Compatibility Plan (ALUCP).**
- Issue 2: Would the proposed project result in a conflict with the environmental goals, objectives, or recommendations of the General Plan or affected community plans?**
- Issue 3: Would the proposed project result in a conflict with adopted environmental plans, including the City of San Diego's Multiple Species Conservation Program (MSCP) Subarea Plan or other approved local, regional or state habitat conservation plan adopted for the purpose of avoiding or mitigating an environmental effect for the area?**

The CAP planning area encompasses all land within the City General Plan planning area, which includes all of the City's Community Plan areas. The CAP does not propose any land use changes for any parcels within the planning area; rather, the CAP proposes energy efficiency improvements to existing buildings, utility systems, and roadway infrastructure to support existing land uses. The PEIR shall identify the relevant goals, objectives, and recommendations within the General Plan and various Community Plans and analyze whether implementation of all five strategies would be consistent with them.

The PEIR shall also evaluate conformance with the City of San Diego's MSCP Subarea Plan and Biological Resources Guidelines (2012). The PEIR should address land use compatibility issues identified in the ALUCP, including such issues as aircraft safety, noise, vibration, and the potential for aircraft operations interference.

VISUAL EFFECTS AND NEIGHBORHOOD CHARACTER

- Issue 1: Would the project affect the visual quality of the area, particularly with respect to views from public viewing areas, vistas, or open spaces?**
- Issue 2: Would the proposed project be compatible with surrounding development in terms of bulk, scale, materials, or style? Would adverse aesthetic impacts result from the project?**
- Issue 3: Would the proposed project create substantial light or glare which would adversely affect daytime or nighttime views in the area?**

This section of the PEIR should include a discussion of the potential for changes to the visual character of existing development due to retrofit activities, solar panel installation, increased urban forest canopy, and the potential for changes to scenic resources from utility enhancements that could result from the implementation of Strategy 1: Energy and Water Efficient Buildings and Strategy 5: Climate Resiliency. The PEIR also should analyze the potential for proposed building material and solar arrays to emit or reflect a significant amount of light or glare and any potential effect on aviation.

AIR QUALITY/ODOR

Issue 1: Would the proposed project result in air emissions that would substantially deteriorate ambient air quality, including the exposure of sensitive receptors to substantial pollutant concentrations, (e.g., exposure to new residential areas resulting from truck route emissions; MHPA buffers)?

Issue 2: Would the proposed project affect the ability of the Regional Air Quality Strategy (RAQS) to meet the federal and state clean air standards? Would the proposed project conflict with implementation of other regional air quality plans?

The PEIR should describe the City of San Diego's climatological setting within the San Diego Air Basin and the basin's current attainment levels for state and federal Ambient Air Quality Standards. It should discuss both the potential stationary and non-stationary air emission sources related to construction activities associated with building retrofits, energy generation system installations, transportation-related improvements, and utility system enhancements. Should the project result in a significant decrease in the levels-of-service of roadways or intersections near transit-priority areas, the PEIR should address the potential degradation of air quality which may result, including the possibility of "hotspots" within the area, as analyzed in the General Plan EIR.

The PEIR should discuss any short, long-term, and cumulative impacts the project may have on regional air quality, including construction and transportation-related sources of air pollutants, and any proposed mitigation measures.

GREENHOUSE GAS EMISSIONS

Issue 1: Would the proposed project generate Greenhouse Gas (GHG) emissions, either directly or indirectly, that may have a cumulatively significant impact on the environment?

Issue 2: Would the proposed project conflict with the reduction measures identified in CARB's AB 32 Scoping Plan?

The GHG analysis should discuss the City of San Diego's the GHG emissions in the City through the CAP horizon year 2035, the GHG emissions reduction goals established in the CAP, and the potential for GHG emissions sources resulting from CAP reduction measure implementation. It should discuss any short-term, long-term, and cumulative impacts from General Plan development with and without CAP implementation may have on the region's ability to meet GHG emissions reduction goals and any proposed mitigation measures.

HISTORICAL RESOURCES

Issue 1: Would the proposed project result in any adverse physical or aesthetic effects to a prehistoric or historic building or structure?

The PEIR should discuss the potential for building retrofits to alter an existing historic building per Strategy 1: Energy and Water Efficient Buildings, and how projects being retrofitted would not be altered substantially in character as a result of such retrofits. The PEIR should discuss how building retrofits facilitated by the project would adhere to

applicable laws are regulations intended to protect historic resources, including the National Historic Preservation Act, the City of San Diego *Historical Resources Regulations of the Land Development Code* (Chapter 14, Division 3, and Article 2), and the Historic Preservation Element of the General Plan.

TRAFFIC/CIRCULATION

Issue 1: Would the proposed project result in a substantial impact upon existing or planned transportation systems.

Issue 2: Would the proposed project create substantial alterations to present circulation movements including effects on existing public access points and/or resulting from anticipated changes in transportation modes?

Issue 3: Would the proposed project conflict with the adopted policies, plans or programs supporting alternative transportation modes (e.g., bus turnouts, trolley extensions, bicycle lanes, bicycle racks, etc.)?

The PEIR would discuss any envisioned modification and/or improvements to the existing circulation system per Strategy 3: Bicycling, Walking, Transit & Land Use, including City streets, intersections, freeways and interchanges from the implementation of the CAP. The PEIR would discuss anticipated transportation mode alterations resulting from CAP implementation, relating to the improvements and expansion of the mass transit system, pedestrian and bicycle infrastructure, vehicle roundabouts, and other improvements.

UTILITIES

Issue 1: Would the proposed project result in a need for new systems, or require substantial alterations to existing infrastructure in order to meet the goals identified in the CAP?

The PEIR would address the need of future construction or expansion of infrastructure necessary to meet the goals described in Strategy 1: Energy and Water Efficient Buildings, Strategy 2: Clean and Renewable Energy, and Strategy 4: Zero Waste, including physical changes to the City's infrastructure, such as, but not limited to, solid waste facilities and renewable energy facilities.

WATER SUPPLY

Issue 1: Would the proposed project affect the ability of the water serving agencies (City of San Diego, County Water Authority) to provide water? Specifically, would the project comply with provisions contained in Senate Bills 610 and 221?

Senate Bill 610 amended state law, effective January 1, 2002, to improve the link between information on water availability and certain land use decisions made by cities and counties. The statute requires detailed information regarding water availability to be provided to the city and county decision-makers prior to approval of specified large development projects. The statute also requires this detailed information be included in the administrative record that serves as the evidentiary basis for an approval action by the city or county on such

projects. The PEIR would include a discussion on the applicability of this law as it pertains to CAP implementation.

The PEIR would also address public water supply services to ensure compliance with SB 610, and it should also discuss the intention of CAP reduction strategies to reduce water demand through building retrofits and use of water efficient landscaping, as described in Strategy 1: Energy and Water Efficient Buildings.

IV. SIGNIFICANT ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

This section shall describe the significant unavoidable impacts of the Program, including those significant impacts that can be mitigated but not reduced to below a level of significance.

V. SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

In accordance with CEQA Section 15126.2(c), the PEIR must include a discussion of any significant irreversible environmental changes which would be caused by the proposed action should it be implemented. The PEIR should also address the use of nonrenewable resources associated with Program implementation. See CEQA Section 15127 for limitations on the requirements for this discussion.

VI. GROWTH INDUCEMENT

The PEIR should address the potential for growth inducement through implementation of the project. The PEIR should discuss the ways in which the CAP could foster economic or population growth, or construction of additional housing either directly or indirectly. Accelerated growth could further strain existing community facilities or encourage activities that could significantly affect the environment. This section need not conclude that growth-inducing impacts, if any, are significant unless the project would induce substantial growth or concentration of population.

V. CUMULATIVE IMPACTS

The evaluation of cumulative impacts is required by State CEQA Guidelines Section 15130 to be based on either: “(A) a list of past, present, and probably future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or (B) a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative effect. Any such planning document shall be referenced and made available to the public at a location specified by the Lead Agency.” The PEIR would use the projections contained in the General Plan to complete the cumulative impacts analysis for the CAP.

VII. EFFECTS FOUND NOT TO BE SIGNIFICANT

A separate section of the PEIR should include a brief discussion of issue areas that were not considered to be potentially significant. If these or other potentially significant issue areas arise during detailed environmental investigation of the project, however, consultation with this division is recommended to determine if these other issue areas need to be addressed in

the PEIR. Issues considered not to be potentially significant are Agricultural Resources, Biological Resources, Geologic Resources, Health and Safety/Hazardous Materials, Hydrology/Water Quality, Mineral Resources, Noise, Paleontological Resources, and Public Services and Facilities. Additionally, as supplementary information is submitted, the EIR may need to be expanded to include additional issue areas.

VI. ALTERNATIVES

The PEIR should analyze reasonable alternatives that avoid or mitigate the significant environmental impacts. These alternatives should be identified and discussed in detail, and should address all significant impacts. The alternative's analysis should be conducted in sufficient graphic and narrative detail to clearly assess the relative level of impacts and feasibility. Preceding the detailed alternatives analysis should be a section entitled "Alternatives Considered but Rejected." This section should include a discussion of preliminary alternatives that were considered but not analyzed in detail. The reason for rejection should be explained.

At a minimum, the following alternatives should be considered:

1. THE NO PROJECT ALTERNATIVE

The No Project Alternative should discuss the existing conditions of the planning area at the time the Notice of Preparation is published, as well as what would be reasonably expected to occur in the foreseeable future if the CAP were not approved. This alternative should compare the environmental effects of the planning area remaining in its existing state (or in what would reasonably be expected to occur on-site) against environmental effects that would occur if the CAP were approved. Should the No Project Alternative prove to be the environmentally preferred alternative, then according to CEQA, another environmentally preferred alternative must be identified.

2. ENVIRONMENTALLY SUPERIOR ALTERNATIVE

This alternative would reflect modified CAP reduction strategies or an alternative plan which substantially avoids or lessens potentially significant impacts to the environment that were identified in the impact analysis portion of the PEIR.

VIII. MITIGATION FRAMEWORK - MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

A Mitigation Framework should be prepared to provide guidance for development projects that would tier off the PEIR to demonstrate compliance with the CAP Strategies, Goals, and Targets for reducing GHG emissions. Mitigation Framework should be clearly identified, discussed, and its effectiveness assessed in each issue section of the PEIR. The separate Mitigation Framework should also be contained (verbatim) as a separate section, which will be attached to the PEIR.

APPENDIX 3

State Clearinghouse Distribution Letter

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EDMUND G. BROWN JR.
GOVERNOR

STATE OF CALIFORNIA
GOVERNOR'S OFFICE of PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT



KEN ALEX
DIRECTOR

Notice of Preparation

February 18, 2015

To: Reviewing Agencies

Re: Climate Action Plan
SCH# 2015021053

Attached for your review and comment is the Notice of Preparation (NOP) for the Climate Action Plan draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Rebecca Malone
City of San Diego
1222 First Avenue, MS-501
San Diego, CA 92101

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Attachments
cc: Lead Agency

**Document Details Report
State Clearinghouse Data Base**

SCH# 2015021053
Project Title Climate Action Plan
Lead Agency San Diego, City of

Type NOP Notice of Preparation

Description City Council Approval for the adoption of the Climate Action Plan (CAP), implementing regulations or policies, which may require amendments to the Municipal Code and/or Land Development Code. Former Governor Arnold Schwarzenegger's Executive Order S-3-05 established the 2050 statewide GHG reduction target of 80 percent below 1990 levels. The City of San Diego has prepared a draft CAP that identifies measures to effectively meet greenhouse gas (GHG) reduction targets for 2020 and 2035, as "interim" targets for achieving the 2050 target. The CAP estimates the GHG emissions for the City of San Diego in the baseline year 2010 to be around 12.8 million metric tons of carbon dioxide equivalent (MMT CO₂e). By 2020 the CAP estimates the City's emissions would increase to 13.9 MMT CO₂e, and to around 16.2 MMT CO₂e by 2035. With implementation of the CAP, the City aims to reduce emissions 15 percent below the 2010 baseline by 2020 to around 10.9 MMT CO₂e, and by a total of 49 percent by 2035 to 6.4 MMT CO₂e. With implementation of the CAP, it is anticipated that the City would exceed its reduction target by 0.9 MMT CO₂e in 2020 and 155,600 MT CO₂e in 2035. The CAP relies on significantly City and regional actions, continued implementation of federal and state mandates, and five local strategies with associated action steps for target attainment. The five strategy areas are:
Water & Energy Efficient Buildings;
Clean & Renewable Energy;
Bicycling, Walking, Transit & Land Use;
Zero Waste; and
Climate Resiliency.
Implementation of the CAP is divided into:
Early Actions (Adoption of the CAP-December 31, 2017),
Mid-term Actions (Jan 1, 2018-Dec. 31, 2020), and
Longer-Term Actions (2021-2035).

**Document Details Report
State Clearinghouse Data Base**

Lead Agency Contact

Name Rebecca Malone
Agency City of San Diego
Phone 61-446-5371 *Fax*
email
Address 1222 First Avenue, MS-501

City San Diego *State* CA *Zip* 92101

Project Location

County San Diego
City
Region
Cross Streets Citywide
Lat / Long
Parcel No.

<i>Township</i>	<i>Range</i>	<i>Section</i>	<i>Base</i>
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Proximity to:

Highways I-5,I-15,I-805,SR-52,SR-94,SR905
Airports Lindbergh Field, Miramar
Railways San Diego Trolley
Waterways Pacific Ocean, San Diego Bay, Mission Bay, San Diego River, Lake Murray, San Vicente Reservoir,
Schools Multiple
Land Use Various Land Uses, zoning and GP designations intersect with the program elements.

Project Issues Aesthetic/Visual; Air Quality; Archaeologic-Historic; Solid Waste; Traffic/Circulation; Water Supply;
Growth Inducing; Landuse; Cumulative Effects; Other Issues

Reviewing Agencies Resources Agency; California Energy Commission; Department of Water Resources; Department of
Parks and Recreation; Department of Fish and Wildlife, Region 5; Native American Heritage
Commission; Public Utilities Commission; Caltrans, District 11; Air Resources Board, Major Industrial
Projects

Date Received 02/18/2015 *Start of Review* 02/18/2015 *End of Review* 03/19/2015

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P. O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # **2015021053**

Project Title: CLIMATE ACTION PLAN

Lead Agency: City of San Diego

Contact Person: Rebecca Malone

Mailing Address: 1222 First Avenue, MS501

Phone: (619)446-5371

City: San Diego, CA

Zip: 92101

County: San Diego

Project Location: County: San Diego

City/Nearest Community: Citywide

Cross Streets: Citywide

Zip Code: _____

Lat. / Long.: N/ W

Total Acres: _____

Assessor's Parcel No.: _____

Section: _____

Twp.: _____

Range: _____

Base: _____

Within 2 Miles: State Hwy #: I-5, I-15, I-805, SR-52, SR-94, SR-905

Waterways: Pacific Ocean, San Diego Bay, Mission Bay, San Diego River, Lake Murray, San Vicente Reservoir, Otay Reservoir

Airports: Lindbergh Field, Miramar

Railways: San Diego Trolley

Schools: Multiple

Document Type:

CEQA: ☒ NOP
☐ Early Cons
☐ Neg Dec
☐ Mit Neg Dec

☐ Draft EIR
☐ Supplement/Subsequent EIR
(Prior SCH No.) _____
Other _____

NEPA: ☐ NOI
☐ EA
☐ Draft EIS
☐ FONSI

Other: ☐ Joint Document
☐ Final Document
☐ Other _____

Local Action Type:

☐ General Plan Update
☐ General Plan Amendment
☐ General Plan Element
☐ Community Plan
☐ Specific Plan
☐ Master Plan
☐ Planned Unit Development
☐ Site Plan

☐ Rezone
☐ Prezone
☐ Use Permit
☐ Land Division (Subdivision, etc.)

☐ Annexation
☐ Redevelopment
☐ Coastal Permit
☒ Other: City

Council Approval of the Climate Action Plan

Development Type:

☐ Residential: Units _____ Acres _____
☐ Office: Sq.ft. _____ Acres _____ Employees _____
☐ Commercial: Sq.ft. _____ Acres _____ Employees _____
☐ Industrial: Sq.ft. _____ Acres _____ Employees _____
☐ Educational _____
☐ Recreational _____

☐ Water Facilities: Type _____ MGD _____
☐ Transportation: Type _____
☐ Mining: Mineral _____
☐ Power: Type _____ MW _____
☐ Waste Treatment: Type _____ MGD _____
☐ Hazardous Waste: Type _____
☒ Other: Climate Action Plan

Project Issues Discussed in Document:

☒ Aesthetic/Visual
☐ Agricultural Land
☒ Air Quality
☒ Archeological/Historical
☐ Biological Resources
☐ Coastal Zone
☐ Drainage/Absorption
☐ Economic/Jobs
☒ Other Public Utilities, Greenhouse Gas Emissions
☐ Fiscal
☐ Flood Plain/Flooding
☐ Forest Land/Fire Hazard
☐ Geologic/Seismic
☐ Minerals
☐ Noise
☐ Population/Housing Balance
☐ Public Services/Facilities
☐ Recreation/Parks
☐ Schools/Universities
☐ Septic Systems
☐ Sewer Capacity
☐ Soil Erosion/Compaction/Grading
☒ Solid Waste
☐ Toxic/Hazardous
☒ Traffic/Circulation
☐ Vegetation
☐ Water Quality
☒ Water Supply/Groundwater
☐ Wetland/Riparian
☐ Wildlife
☒ Growth Inducing
☒ Land Use
☒ Cumulative Effects

Present Land Use/Zoning/General Plan Designation: Various Land Uses, zoning and GP designations intersect with the program elements.

Project Description: *(please use a separate page if necessary)*

SEE PROJECT DESCRIPTION BELOW:

Note: The state Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

January 2008

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "X".
If you have already sent your document to the agency please denote that with an "S".

<input checked="" type="checkbox"/> Air Resources Board	<input type="checkbox"/> Office of Emergency Services
<input type="checkbox"/> Boating & Waterways, Department of	<input type="checkbox"/> Office of Historic Preservation
<input type="checkbox"/> California Highway Patrol	<input type="checkbox"/> Office of Public School Construction
<input type="checkbox"/> CalFire	<input type="checkbox"/> Parks & Recreation
<input checked="" type="checkbox"/> Caltrans District # <u>11</u>	<input type="checkbox"/> Pesticide Regulation, Department of
<input type="checkbox"/> Caltrans Division of Aeronautics	<input type="checkbox"/> Public Utilities Commission
<input type="checkbox"/> Caltrans Planning (Headquarters)	<input checked="" type="checkbox"/> Regional WQCB # <u>9</u>
<input type="checkbox"/> Central Valley Flood Protection Board	<input checked="" type="checkbox"/> Resources Agency
<input type="checkbox"/> Coachella Valley Mountains Conservancy	<input type="checkbox"/> S.F. Bay Conservation & Development Commission
<input checked="" type="checkbox"/> Coastal Commission	<input type="checkbox"/> San Gabriel & Lower L.A. Rivers and Mtns Conservancy
<input type="checkbox"/> Colorado River Board	<input type="checkbox"/> San Joaquin River Conservancy
<input type="checkbox"/> Conservation, Department of	<input type="checkbox"/> Santa Monica Mountains Conservancy
<input type="checkbox"/> Corrections, Department of	<input type="checkbox"/> State Lands Commission
<input type="checkbox"/> Delta Protection Commission	<input type="checkbox"/> SWRCB: Clean Water Grants
<input type="checkbox"/> Education, Department of	<input type="checkbox"/> SWRCB: Water Quality
<input type="checkbox"/> Energy Commission	<input type="checkbox"/> SWRCB: Water Rights
<input checked="" type="checkbox"/> Fish & Game Region # <u>5</u>	<input type="checkbox"/> Tahoe Regional Planning Agency
<input type="checkbox"/> Food & Agriculture, Department of	<input type="checkbox"/> Toxic Substances Control, Department of
<input type="checkbox"/> General Services, Department of	<input checked="" type="checkbox"/> Water Resources, Department of
<input type="checkbox"/> Health Services, Department of	<input checked="" type="checkbox"/> Other EPA,
<input type="checkbox"/> Housing & Community Development	<input type="checkbox"/> Other _____
<input type="checkbox"/> Integrated Waste Management Board	<input type="checkbox"/> Other _____
<input checked="" type="checkbox"/> Native American Heritage Commission	

Local Public Review Period (to be filled in by lead agency)

Starting Date February 18, 2015 Ending Date March 20, 2015

Lead Agency (Complete if applicable):

Consulting Firm: _____	Applicant: <u>City of San Diego, Planning Department</u>
Address: _____	Address: <u>1222 1st Avenue, MS 501</u>
City/State/Zip: _____	City/State/Zip: <u>San Diego, CA 92101</u>
Contact: _____	_____
Phone: _____	_____

Signature of Lead Agency Representative:  Date: 2/13/15

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

NOP Distribution List

County:

SAN DIEGO

SCH#

2015021053

Resources Agency

- ☒ Resources Agency
Nadell Gayou
- ☐ Dept. of Boating & Waterways
Nicole Wong
- ☐ California Coastal Commission
Elizabeth A. Fuchs
- ☐ Colorado River Board
Lisa Johansen
- ☐ Dept. of Conservation
Elizabeth Carpenter
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Environmental Stewardship Section
- ☐ California Department of Resources, Recycling & Recovery
Sue O'Leary
- ☐ S.F. Bay Conservation & Dev't. Comm.
Steve McAdam
- ☒ Dept. of Water Resources
Resources Agency
Nadell Gayou

Fish and Game

- ☐ Depart. of Fish & Wildlife
Scott Flint
Environmental Services Division
- ☐ Fish & Wildlife Region 1
Donald Koch

- ☐ Fish & Wildlife Region 1E
Laurie Harnsberger
- ☐ Fish & Wildlife Region 2
Jeff Drongesen
- ☐ Fish & Wildlife Region 3
Charles Armor
- ☐ Fish & Wildlife Region 4
Julie Vance
- ☒ Fish & Wildlife Region 5
Leslie Newton-Reed
Habitat Conservation Program
- ☐ Fish & Wildlife Region 6
Tiffany Ellis
Habitat Conservation Program
- ☐ Fish & Wildlife Region 6 I/M
Heidi Sickler
Inyo/Mono, Habitat Conservation Program
- ☐ Dept. of Fish & Wildlife M
George Isaac
Marine Region

Other Departments

- ☐ Food & Agriculture
Sandra Schubert
Dept. of Food and Agriculture
- ☐ Depart. of General Services
Public School Construction
- ☐ Dept. of General Services
Anna Garbeff
Environmental Services Section
- ☐ Delta Stewardship Council
Kevan Samsam
- ☐ Housing & Comm. Dev.
CEQA Coordinator
Housing Policy Division

Independent

Commissions, Boards

- ☐ Delta Protection Commission
Michael Machado

- ☐ OES (Office of Emergency Services)
Dennis Castrillo
- ☒ Native American Heritage Comm.
Debbie Treadway
- ☒ Public Utilities Commission
Leo Wong
- ☐ Santa Monica Bay Restoration
Guangyu Wang
- ☐ State Lands Commission
Jennifer Deleong
- ☐ Tahoe Regional Planning Agency (TRPA)
Cherry Jacques

Cal State Transportation Agency CalSTA

- ☐ Caltrans - Division of Aeronautics
Philip Crimmins
- ☐ Caltrans - Planning
HQ LD-IGR
Terri Pencovic
- ☐ California Highway Patrol
Suzann Ikeuchi
Office of Special Projects

Dept. of Transportation

- ☐ Caltrans, District 1
Rex Jackman
- ☐ Caltrans, District 2
Marcelino Gonzalez
- ☐ Caltrans, District 3
Eric Federicks - South
Susan Zanchi - North
- ☐ Caltrans, District 4
Erik Alm
- ☐ Caltrans, District 5
Larry Newland
- ☐ Caltrans, District 6
Michael Navarro
- ☐ Caltrans, District 7
Dianna Watson

- ☐ Caltrans, District 8
Mark Roberts
- ☐ Caltrans, District 9
Gayle Rosander
- ☐ Caltrans, District 10
Tom Dumas
- ☒ Caltrans, District 11
Jacob Armstrong
- ☐ Caltrans, District 12
Maureen El Harake

Cal EPA

Air Resources Board

- ☒ All Other Projects
Cathi Slaminski
- ☐ Transportation Projects
Nesamani Kalandiyur
- ☒ Industrial/Energy Projects
Mike Tollstrup
- ☐ State Water Resources Control Board
Regional Programs Unit
Division of Financial Assistance
- ☐ State Water Resources Control Board
Jeffery Werth
Division of Drinking Water
- ☐ State Water Resources Control Board
Student Intern, 401 Water Quality Certification Unit
Division of Water Quality
- ☐ State Water Resources Control Board
Phil Crader
Division of Water Rights
- ☐ Dept. of Toxic Substances Control
CEQA Tracking Center
- ☐ Department of Pesticide Regulation
CEQA Coordinator

Regional Water Quality Control Board (RWQCB)

- ☐ RWQCB 1
Cathleen Hudson
North Coast Region (1)
- ☐ RWQCB 2
Environmental Document Coordinator
San Francisco Bay Region (2)
- ☐ RWQCB 3
Central Coast Region (3)
- ☐ RWQCB 4
Teresa Rodgers
Los Angeles Region (4)
- ☐ RWQCB 5S
Central Valley Region (5)
- ☐ RWQCB 5F
Central Valley Region (5)
Fresno Branch Office
- ☐ RWQCB 5R
Central Valley Region (5)
Redding Branch Office
- ☐ RWQCB 6
Lahontan Region (6)
- ☐ RWQCB 6V
Lahontan Region (6)
Victorville Branch Office
- ☐ RWQCB 7
Colorado River Basin Region (7)
- ☐ RWQCB 8
Santa Ana Region (8)
- ☒ RWQCB 9
San Diego Region (9)

☐ Other _____

☐ _____
Conservancy

APPENDIX 4

NOP Comment Letters

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AMERICAN LUNG ASSOCIATION IN CALIFORNIA
2750 FOURTH AVENUE, SAN DIEGO, CA 92103
1-800-LUNGUSA LUNGFORCE.ORG

March 17, 2015
City of San Diego
Planning Department, MS 501
ATTN: Rebecca Malone
1222 First Avenue
San Diego, CA 92101

RE: San Diego Climate Action Plan PEIR

Dear Rebecca:

Thank you for the opportunity to submit written comments on the scoping and content of the Climate Action Plan PEIR.

First, let us express our appreciation that the City's draft Climate Action Plan is an aggressive effort to conform to the mandates of AB-32 and S-3-05. We look forward to working with the City to refine and adopt the Plan. We look forward to the opportunity to review the Technical Appendices and determine what additional information is needed to ensure this maximizes improvements to air quality and public health today and for future generations.

1. There is a sense of urgency to adopt the City's Climate Action Plan, but the City must release the Technical Appendices before starting the EIR.

To ensure that the PEIR is a thoughtful and robust analysis of the Plan and fully discloses the benefits of the Plan and alternatives we offer the following suggestions:

2. Measure the public health impacts of the baseline as well as the public health benefits of the Plan and alternatives in terms of changes in active transportation modes (walk, bike), transit usage and improved air quality due to mode shift. Public health modeling tools are becoming available for use in urban planning processes, including the Integrated Transport and Health Impact Modelling Tool (ITHIM), Urban Footprint and others. The City should invest in using these tools to quantify the public health benefits of the proposed mobility mode shifts.
3. Prioritize those greenhouse gas reduction strategies that maximize co-benefits of reducing air pollutants and providing rapid public health improvement through increased access to safe, practical walking and biking infrastructure.
4. Use CAPCOA's CalEEMod, a statewide land use emissions computer model, or equivalent. The model can be used to identify mitigation measures to reduce criteria pollutant and GHG emissions along with calculating the benefits achieved from such measures. Additional effort should be placed on evaluating



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Letter to City of San Diego, Planning Department, MS 501, ATTN: Rebecca Malone
RE: San Diego Climate Action Plan PEIR
Page 1 of 1

the benefits and impacts from the perspective of social equity and reducing health disparities

5. Verify that the Plan is enforceable and has measurable performance metrics; if not, what are the impacts if the Plan's goals are not achieved?
6. Verify the Plan can realistically meet the long-term greenhouse gas reduction targets, including 2035 and 2050 reduction targets as required by AB-32 and S-3-05.
7. A significant portion of the greenhouse gas reductions comes from mode shifts from single-occupancy cars to transit, walking and biking. The resources needed to achieve those mode shifts rest primarily with a 3rd party, SANDAG. If the mode shifts don't or can't happen because of the lack of transportation investment, identify viable alternatives that can provide equivalent GHG reductions.
8. Include at least one alternative that is more aggressive in greenhouse gas reduction than the draft Climate Action Plan so that decision makers can understand the limits of available strategies as well as measure them against the socio-economic impacts and benefits.

We look forward to working with the City of San Diego through the PEIR process and the adoption of the Climate Action Plan.

Sincerely,

A handwritten signature in cursive script that reads "Jessie Bustamante". The signature is written in dark ink and is positioned below the word "Sincerely,".

Jessie Bustamante, Executive Director
American Lung Association in California

Rancho Bernardo Community Planning Board

P.O. Box 270831, San Diego, CA 92198

www.rbplanningboard.com

March 19, 2015

Ms. Rebecca Malone
City of San Diego, Planning Department
1222 First Avenue, MS 501
San Diego, CA 92101

RE: Notice of Preparation of a Draft Program Environmental Impact Report for the City of
San Diego Climate Action Plan

Dear Ms. Malone:

The Rancho Bernardo Community Planning Board appreciates the opportunity to provide input regarding the scope of the forthcoming draft Program Environmental Impact Report (PEIR) for the City's draft Climate Action Plan (CAP). Presented below are the comments approved (by a vote of 12 to 0) for submittal to the Planning Department at the Planning Board's meeting of March 19, 2015.

1. Introduction – As the intent of the PEIR is to streamline CEQA requirements for future projects, the Introduction section should describe the streamlining process. For instance, how will the determination be made that a project is consistent with projected GHG emissions presented in the PEIR?
2. Project Description – This section should clearly explain the basis for the estimate of GHG emissions in baseline year 2010, as presented in the CAP, as well as the basis for the estimates for 2020. The assumptions related to future development intensity along with assumptions related the implementation of actions that would be in place to reduce overall GHG emissions should be clearly stated, as the validity of these assumptions will need to be monitored over time. Should the assumptions prove to be invalid, future projects could no longer rely on the PEIR for streamlining under CEQA.
3. Greenhouse Gas Emissions – The PEIR should analyze the implementation proposals within the CAP to ensure that the goals presented are supported by specific actions intended to achieve the plan goals. This section should also analyze how the CAP proposes to monitor GHG emissions to ensure the goals of the plan are being achieved.

4. Mitigation Framework – To ensure the implementation of future projects will not result in GHG emissions that exceed current estimates for 2020, the mitigation framework should include a monitoring component that periodically evaluates how development within the City may differ from the assumptions made when the PEIR and CAP were approved. For example, General Plan amendments may be approved that exceed the development intensity assumptions; changes to the Land Development Ordinance result in increased development intensity; or the assumptions made in the CAP as they related to the Urban Forest Management Plan are invalid because budget decisions have limited the quantity of trees planted.

Thank you again for the opportunity to provide our comments. We look forward to reviewing and commenting on the draft PEIR when it is made available for public review and comment.

Sincerely,

Original signed letter in the mail

Lou Dell'Angela
Chair, Rancho Bernardo Community Planning Board

cc: Councilmember Mark Kersey, District 5

March 19, 2015

Ms. Rebecca Malone
Associate Planner
City of San Diego Planning Department
1222 First Avenue, MS 501
San Diego, CA 92101

Sent via email: dsdeas@sandiego.gov

RE: PEIR for City of San Diego Climate Action Plan

On behalf of the San Diego Housing Federation, please accept these comments to the Scoping Plan of the City of San Diego's Climate Action Plan. Founded in 1990, the San Diego Housing Federation serves as the collective voice of those who support, build and finance affordable homes in the San Diego region.

We fully support the legally binding greenhouse gas reduction targets of the draft Climate Action Plan – 15% below baseline for 2020 and 49% below baseline for 2035. California has committed to reducing GHG emissions while accommodating a growing population and encouraging economic growth. These targets are in line with the state's 2020 and 2050 targets, and will hopefully help ensure we are taking the minimum steps necessary to protect our quality of life for generations to come. We also support the draft Plan's key goals, including:

- Use 100% clean energy citywide by 2035;
- Use public transit, walking, and biking for 50% of commutes by 2035;
- Reduce average vehicle commute distance by 2 miles by 2035;
- Reduce waste by 90%; and
- Achieve 35% urban tree canopy average by 2035.

As an affordable housing organization, we are particularly interested with the nexus between land use and transportation to meet greenhouse reductions. We support opportunities for San Diegans to drive less by living in affordable homes near to transit, service and jobs. We believe that with the right transportation and land use planning and investment, the San Diego region

can achieve these goals to create healthy, vibrant communities while reaching greenhouse gas reduction goals.

Finally, we join our allies such as Environmental Health Coalition in supporting the integration of social and environmental equity and middle-class job creation into all of the greenhouse gas reduction strategies.

We offer the following recommendations and comments for your consideration during the environmental review and alternatives analysis to further strengthen the plan:

Affordable Housing Must be Component of Reducing the Average Vehicle Commute

We support the City's goals of reducing the average vehicle commute distance by promoting effective land use (Goal 3.9) and increasing the use of commuter transit, walking and biking (Goals 3.1, 3.2, 3.3). We also support the Action items listed to meet those goals, such as implementing the General Plan's Mobility Element and the City of Villages Strategy in Transit Priority Areas, as well as implementing transit-oriented development within Transit Priority Areas.

However, there seems to be a gap between promoting effective land use and actually achieving better land use. The City's General Plan was passed in 2008 to promote a land use pattern that would reduce VMT and result in our region meeting or exceeding our climate goals. Unfortunately, the City of Villages strategy has not been meaningfully implemented or required of new developments, which has prevented the City from achieving the necessary reductions in VMTs. This begs the question of how the City can identify implementing the General Plan's City of Villages strategy as the action that has the necessary substantial evidence that will lead to the necessary VMT reductions.¹ We ask that the PEIR analyze what implementation strategies/actions would be needed to ensure the reduction of average vehicle miles. It is not enough to have mere policy goals without any enforceable targets, incentives, programs and policies to ensure this type of development occurs.

Even more critical to reducing VMTs than developing any type of housing near transit and jobs, is developing affordable housing near transit and jobs. The City must analyze the interrelationship between the construction of affordable housing in transit-oriented

¹ We note that some of the supporting strategies in the plan do seem to have a more direct correlation with achieving the VMT reductions, such as locating a majority of all new residential areas in Transit Priority Areas, but those are not required to be implemented.

developments and a reduction in VMTs. Groundbreaking research has found that building affordable homes near transit leads to a significant reduction in VMT. In the May 2014 study by Transform and the California Housing Partnership Corporation (CHPC), *Why Creating and Preserving Affordable Homes Near Transit Is a Highly Effective Way Climate Protection Strategy*, they found:

- Lower Income households drive 25-30% fewer miles when living within 1/2 mile of transit than those living in non-TOD areas. When living within 1/4 mile of frequent transit they drove nearly 50% less.
- Higher Income households drive more than twice as many miles and own more than twice as many vehicles as Extremely Low-Income households living within 1/4 mile of frequent transit. This underscores why it is critical to ensure that low-income families can afford to live in these areas.

Other ancillary benefits identified in the Transform report to constructing affordable housing in transit-oriented developments include:

- Reducing car ownership by .63 vehicles per household, or more than one car for every two low income households, and freeing up land used for parking to create housing and public space.
- Lowering household transportation costs and providing improved access to jobs and services.

Furthermore, affordable housing developers have a proven track record of implementing transportation demand management strategies like: reduced parking, free or reduced-price transit passes for residents, and bike and car share on site.

While still in draft form, the California Housing Partnership Corporation (CHPC) and the Center for Neighborhood Technology (CNT) applied the statewide VMT model to San Diego County and found similar results. We hope to present the findings and discuss their implications during this environmental review process.

City's Housing Element Already Prioritizes Transit-Oriented Affordable Housing

According to the City of San Diego's Housing Element, the San Diego Housing Commission started its Three-Year Work Plan to Facilitate Transit-Oriented Affordable Housing

Development. We support this effort and hope this plan can be integrated into the set of required actions in the Climate Plan achieve reductions in VMT.

Another approach listed in the Housing Element is the development of an Equitable Urban Reinvestment Program, centered around Transit Village Development Districts. The Housing Element says the City could prepare a Transit Village Plan for all land located within one-half mile of a transit station. These plans would support implementation of the City of Villages concept around transit stations, focusing on intensifying appropriate land uses, promoting connections between jobs and housing, and addressing infrastructure needs.

Affordable Housing Goes Hand in Hand with Quality of Life and Sustainability of Region

Creating housing opportunities for families of all incomes is critical to protecting the sustainability of our region for decades to come. According to a May 2014 California Housing Partnership study, there is a shortfall of 127,930 homes affordable to very low and low-income households in the San Diego region. At the same time, the region has experienced a 78 percent decrease in state and federal resources to build affordable homes that could help close the gap on the shortfall. A lack of affordable homes combined with rising rents are forcing more and more of San Diego's low-wage workforce to "drive to qualify" – enduring longer commutes further away from jobs in order to find an affordable place to live. This directly contradicts the explicit goals of the City's General Plan, "City of Villages" strategy. As already highlighted, the City must craft specific programs and policies that ensure development of affordable homes in these City of Villages.

Prioritize public and active transit investments over vehicle-reliant modes of transportation

The San Diego Housing Federation further supports a transportation planning scenario that prioritizes transit and active transit over freeway expansion and auto-centric investment. The City must include in its environmental review and alternatives analysis a way to include the need to choose one investment over the other in order to achieve its VMT reduction goals. An "all of the above" strategy will not be sufficient.

Further, by proactively choosing investments in transit and active transportation options in lieu of highway/freeway expansions/road widenings, the City will not only be making wise decisions for climate planning that will improve community health, but will also be taking steps to place our region in a leading role to attract additional investments that accompany this type of planning.

Finally, we agree with Environmental Health Coalition that the neighborhoods who are most likely to use transit and are also the most vulnerable populations to climate change, as identified by CalEnviroScreen, should be the first recipients of new transit, biking and walking infrastructure.

The data makes clear the powerful way in which living close to transit and household income affect household travel behaviors. With these policies in place, the production and preservation of affordable TOD homes will significantly reduce VMT, offering an important tool in San Diego's efforts to reduce GHG emissions.

Recommendation for Action Items to Include in Goal 3.9:

- Housing Element policy of Transit-Oriented Affordable Housing as Action Item to achieve VMT target
- Housing Element policy of Equitable Urban Reinvestment Program centered around Transit Village Development Districts to achieve VMT target
- Using data from report cited above, set specific target for construction of sufficient affordable housing units near transit and jobs to achieve VMT target
- Require City to choose transit and active transportation above vehicle-reliant modes of transportation including freeway, roadway and highway expansions, including at SANDAG

City Must Commit to Climate Adaptation and Resilience Planning

While the plan clearly acknowledges the need for developing a stand alone climate adaptation document, there is not a deadline for adopting a plan. Given the critical need for the City to reduce its vulnerability to climate impacts and enhance its local capacity to respond—especially for sensitive populations and communities – the environmental review and alternatives analysis must commit the City to adopting an Adaptation plan.

Recommendation for Action:

- Commit the City to adopt an Adaption Plan by 2017.

Ensuring Success During Implementation

We support the Monitoring and Reporting chapter of the draft Climate Plan. We agree with the current list of actions, but we recommend an additional action item requiring the City to

identify the proper staffing, financing, and funding needed to implement the plan and reach the identified goals and targets in the timelines outlined in the draft. Funding and budget allocation should be a part of the annual monitoring and reporting to ensure sufficient progress is made on all of the action items in the plan.

Recommendation for Action Item to Include in Monitoring & Reporting:

- Require the City to identify the proper staffing, financing, and funding needed to implement the plan and reach the identified goals and targets in the timelines outlined in the draft.

Thank you for the opportunity to make these comments and we look forward to working with you through the environmental review process to ensure San Diego remains a leader in tackling the biggest public health, environmental and economic crisis facing the City.

Sincerely,



Bruce Reznik
Executive Director



San Diego Chapter
8304 Clairemont Mesa Blvd., Ste 101
San Diego, CA 92111
<http://www.sandiego.sierraclub.org>
858-569-6005

March 19, 2015

Rebecca Malone
Associate Planner, City of San Diego Planning Department
1222 First Avenue, MS 501
San Diego, CA 92101
Sent Via E-mail to: DSDEAS@sandiego.gov; bschoenfisch@sandiego.gov

Subject: Comments Regarding the City of San Diego's Draft Climate Action Plan (CAP), the Notice of Preparation (NOP) of a Draft Program Environmental Impact Report (DPEIR) for that CAP, and Scope of Work for that DPEIR, dated February 18, 2015.

Dear Ms. Malone:

These comments are submitted on behalf of Sierra Club San Diego and our over 12,000 members in San Diego and Imperial Counties. We appreciate the effort the City of San Diego has put into preparing its first Climate Action Plan (CAP). Involving community stakeholders in the planning process has resulted in a better plan and we urge you to continue that community collaboration as this CAP moves through to final adoption and implementation.

The draft CAP includes a number of goals that we think set important precedents for our region. The final CAP needs to reaffirm the commitment to achieve these goals by 2035:

- Reduce GHG emissions 15% by 2020 and 49% by 2035
- 100% renewable energy on the city-wide electrical grid
- 50% of commute trips made by public transit, walking, and biking
- Reduce waste by 90 %
- Achieve 35% urban tree canopy average

However, under CEQA, CAP and CAP EIR decision makers will need to know what target set will be required to support climate stabilization and what set of strategies will achieve those targets. We include Reference 1 as an example of the kind of work that is required.

Establishing these targets will help encourage other cities to follow your lead. It should be noted that Community Choice Aggregation has a special place in the draft CAP, as it is the best policy tool available for moving the City toward its 100% renewable energy goal and, of all the potential actions listed in the draft CAP, it provides the greatest amount of greenhouse gas emission reductions.

The following are several additional specific comments on the Draft CAP and related DPEIR:

VTM Reduction Strategies Require Further State and Regional Action

SANDAG recently changed their method of allocating Vehicle Miles Traveled (VMT) between local jurisdictions and SANDAG as the regional MPO. This is an attempt to more

equitably allocate responsibility for the VMT to the agency that has the greatest ability to influence it. The CAP includes actions to impact local VMT through improved alternative transportation (bicycling, walking and transit) and support for cleaner fueled vehicles (electric vehicle charging infrastructure). But it does not include City support for several key regional and state actions that address the portion of VMT and associated GHG over which the city has less direct control but which will still have indirect impacts on the city. San Diego is a city of 1.3 million people, with 40 of 100 weighted votes at SANDAG. We recommend adding the following:

1. Support for improved state Light Duty Vehicle standards (LDV)

Reference 1 is an example of such a plan for revising standards for LDVs. Its mitigation measures are in the form of requirements for LDVs. The City can lobby at the state and regional level to get such requirements enacted. The Energy Policy Initiative Center (EPIC), which participated in the development of the draft CAP, has determined that LDVs are responsible for 41% of the GHG emitted in San Diego County. There needs to be a set of requirements (state and local enforceable measures) to ensure that LDVs, along with measures to reduce driving by the required amount, support stabilization.

2. Support for improved regional policy/action

Establishing formal policy would provide direction to the city's representatives on SANDAG and could result in improved regional GHG reduction programs. Such policies should include:

- Equitable funding for local government programs on alternative transportation
- Require each city to have an adopted CAP to be eligible for discretionary transportation funding (similar to requirements for affordable housing)
- Support for regional policies that fully address the GHG associated with pass through trips. (This GHG is outside the City's control- but the air pollution and other impacts affect city residents just the same.)
- Encourage SANDAG to reprioritize transit projects over highway projects to the maximum extent legally feasible, including reallocation of Transnet funds as needed and incorporating such policy into the next Regional Transportation Plan.

Greater Certainty is Needed- Particularly for Projected 2035 GHG Reductions

Both the Superior Court and the Appellate Court have ruled that the County CAP has no enforceable measures. This is one of the many reasons the County's approval of the EIR for the County CAP was set aside by the courts. The Superior Court ruling stated bluntly that, "enforceable measures are needed now". While the draft CAP includes a list of quantified measures that are, in some cases, enforceable, these do not have implementation dates (just end date) and there are numerous additional possible actions, many of which the city is already doing or considering, which have not been included as enforceable measures.

For example, the current draft CAP includes this in its list of supporting measures for bicycling, walking and transit:

- *Develop a Parking Plan to include measures such as "unbundled parking" for nonresidential and residential sectors in urban areas.*

However, there is nothing explaining the concept of “unbundled parking”, how to implement such a policy, or how much GHG reduction could be achieved. Stating that a plan will be developed is not the same as having enforceable measures. We refer you to our Reference 2 and to the description in this link: <http://www.sandiego.gov/environmental-services/pdf/sustainable/parkingcosts.pdf>. The Reference 2 mitigation measure was the topic of a brief discussion in the Appellate Court, where a Justice remarked with words to the effect that it was feasible and should not have been ignored.

Furthermore, the projected reductions from the identified measures provide essentially no room for error, particularly for actions by 2035. The projected GHG reductions for 2035 are barely .4% over the minimum reductions required. If any of the measures is adopted just a little late, or is slightly less successful than projected, the target will not be met. The first city in the region to adopt a CAP years ago (Chula Vista) was surprised at their first monitoring report to learn that GHG had gone up instead of down as their CAP program had projected. Similar results have been found in other places- the modeled reductions are hard to achieve in the real world. In order to assure the target reductions are met, additional actions are needed, funding commitments need to be in place, and there needs to be robust contingency planning. In addition, climate-stabilizing targets will likely require that the goals be achieved sooner. Given the nature of our climate crisis, measures need to be implemented as soon as possible.

GHG Reduction Analysis

The GHG reduction analysis and the environmental review in the DPEIR both need to consider how planned freeway expansions and recent gas power plant approvals impact the “Business As Usual” greenhouse gas projections. We believe these contribute to additional GHG emissions that have not been adequately considered in the inventory or analysis of impacts and therefore additional CAP action will be needed to offset these increases.

Alternatives to the Proposed CAP

The EIR process requires consideration of alternatives to the proposed project. We support the need for at an alternative that prioritizes transportation and energy actions in neighborhoods which are most impacted by climate change. CalEnviroScreen or some similar method should be used to identify such communities. This should include programs targeted on energy use reductions in new buildings and energy efficiency improvements in existing buildings that recognize the challenges of such efforts in disadvantaged communities. Transit, complete streets, Transit Oriented Development (TOD), enhanced PACE programs, roof-top solar, neighborhood-scale solar, energy storage, and micro grids should be targeted for such communities. City funds for bicycle, pedestrian and transit projects, as well as tree planting and parks, should also start in and focus on these neighborhoods.

Programs to promote renewable energy systems should also promote entry-level training jobs to expand the work force, giving priority to increasing work-place diversity and to low-income job applicants.

Strengthen Your Commitment to Climate Adaptation Planning

While the CAP includes a description of what the Adaptation Plan will include, there is no completion date specified, nor are there any metrics provided that can be used to measure success or establish accountability. We would like to see the CAP include a

commitment to complete the Adaptation Plan by 2017 and include some basic metrics for what it is required to achieve.

Include a Clear Description of Climate Destabilization

Our research suggests that if too much GHG is emitted, the earth's climate system's positive feedbacks will begin to dominate and the climate will be transformed to one that will not support most current life forms, including our own species.

Potential Environmental Impacts Incorrectly Excluded from Analysis

Three areas with potential adverse impacts have been excluded from the environmental analysis. Two of these should be analyzed in the DPEIR in order to assure that all potential impacts have been fairly considered. These include the following:

- Biological Resources

Action items 1.4, 1.5 and 1.6 related to water use will further reduce the amount of run-off that has historically supported created wetlands. Reducing this water supply could potentially adversely impact the habitat supported by this run-off. This may conflict with provisions of the MSCP and the City of San Diego MHPA that require protection of such habitats. Action item 5.1, the Urban Tree Planting Program, will increase the need for water to support more trees that may conflict with other actions to reduce water use. Such tree planting programs can indirectly support increased wildfire spread and the resultant habitat loss. All such direct and indirect impacts to biological resources need to be considered.

- Health and Safety

Health and safety impacts are a key part of environmental analysis. This needs to address differential impacts on sensitive communities. A recent report by Climate Education Partners, *Facing the Future: How Science Can Help Prepare San Diego Regional Leaders for Climate Change*, includes the following statement, "With more extreme weather, we will see an increase in childhood asthma, infectious disease and heat-induced heart failure. Our children and grandparents, as well as the chronically ill and people with lower incomes, will be most vulnerable." These impacts are cumulative and increasing and will continue to increase unless all levels of government fully implement actions to reduce GHG to below threshold levels where there are serious health impacts. The environmental analysis needs to fully analyze these impacts, and the differential impacts on at-risk communities.

Improve Transparency and Access to Information

All of the background documents that support the analysis of the CAP and DPEIR need to be made easily available, including the technical appendices.

Final Comments

The San Diego Sierra Club is committed to working for climate stabilization. We look forward to working with you toward adoption and implementation of a Climate Action Plan that helps our region support climate stabilization.

Respectfully submitted,

Nick Ervin

Conservation Committee Chair, San Diego Sierra Club

References

- 1.) Bullock, M.; *The Development of California Light-Duty Vehicle (LDV) Requirements to Support Climate Stabilization: Fleet-Emission Rates & Per-Capita Driving*; Paper 2014-30793-AWMA, from the Air and Waste Management Association's 2014 Annual Conference and Exhibition; Long Beach, California, June 24-27, 2014.
- 2.) Bullock, M, *Equitable and Environmentally-Sound Car-Parking Policy at a Work Site*, Oct. 4, 2014 (unpublished report—see web link).

The San Diego Chapter of the Sierra Club is San Diego's oldest and largest grassroots environmental organization, founded in 1948. Encompassing San Diego and Imperial Counties, the San Diego Chapter seeks to preserve the special nature of the San Diego and Imperial Valley area through education, activism, and advocacy. The Chapter has over 12,000 members. The National Sierra Club has over 700,000 members in 65 Chapters in all 50 states, and Puerto Rico.



Rebecca Malone, Associate Planner
City of San Diego Planning Department
1222 First Ave, MS 501
San Diego, CA 92101
Via email: DSDEAS@san Diego.gov

March 19, 2015

Re: San Diego Climate Action Plan Scoping Comments

Dear Ms. Malone,

As a long-term resident of the city of San Diego and a professional environmental/conservation biologist, I have committed much of my time and efforts to protect the species and habitats of this region, its environmental health and quality of life. Climate change threatens our natural environments and San Diegans' right to live in healthy and resilient communities. The City should act now to reduce carbon pollution and consequent climate change, which poses disproportionate risks to sensitive natural resources and neighborhoods that already sustain heightened environmental health risks.

I urge the City to strengthen, adopt, and implement an effective, comprehensive, and enforceable Climate Action Plan (CAP) that reduces carbon pollution to comply with state climate laws, the City's General Plan, and City Council Resolution R-2015-68.

The City and region have committed to – and begun to implement – habitat conservation plans (including the city's Multiple Species Conservation Plan) that conserve substantial amounts of natural lands. These preserved natural lands both reduce the area's production of greenhouse gasses (GHGs) by directing development into more efficient, denser development zones as well as improve/maintain the environment's capacity to process carbon pollution.

As critically important as the "natural environment" component is to reducing carbon pollution, it is through the "developed environment" component that the City can most effectively address carbon pollution. I support the GHG reduction and top-line goals in the draft CAP. There are other aspects of the draft document that should be improved in the final CAP and analyzed in the CEQA document: (1) reduce energy use in new and existing buildings; (2) create an "urban green framework" linking (and increasing) urban park lands, street trees, and other city green spaces with the habitat conservation lands (where feasible); (3) increase the percentage of all travel by mass/public transit and active transportation (e.g., walking and bicycling), which reduces the need for more roads and freeway expansions; (4) prioritize neighborhoods that are most impacted by climate change for transportation and energy actions; and (5) further reduce City water rate (per capita) and overall consumption and greatly increase water reuse as has been recently initiated by the City.

The Climate Action Plan's environmental review should analyze and endorse an Alternate Scenario that strengthens the plan to achieve:

- **Transportation: Improve access, affordability, public health, safety, and equity**
 - Commit City support for a Regional Transportation Plan that funds transit *before* freeways

- Commit the City to prepare new planning and zoning approaches to speed-up its implementation of “transit-oriented-development” and “smart growth centers” throughout the City’s jurisdiction
- Commit the City to promote a Regional Transportation Plan that produces an effective “smart growth” strategy and prioritizes and funds transit *before* freeways
- Commit City funds to improve bicycling and pedestrian infrastructure citywide and increase access to transit, starting in neighborhoods which would best implement those objectives and are most impacted by climate change, such as identified by CalEnviroScreen. The amount of funds should meet or exceed the CAP’s mode-share goals, and be adjusted periodically to ensure achievement of goals.

➤ **Energy: Close the ‘green divide,’ increase renewable sources building efficiencies**

- Facilitate solar installation in all neighborhoods
- Require new buildings to have on-site clean energy such as solar meet their electricity needs, as the City’s General Plan calls for
- Require existing, inefficient buildings to conduct energy audits and efficiency improvements, while ensuring access to financing and funding, to implement the General Plan. Prioritize facilitating improvements in low-moderate income properties
- Upgrade city properties with renewable energy sources and efficiency

➤ **Climate Adaptation and Resilience**

- Commit to adopting an actionable climate adaptation plan by 2017 that protects natural resources, wildlife, our coastline, infrastructure, and public health and safety
- Increase trees and parks, prioritized by carbon reduction effectiveness and local neighborhood need (open space per capita and/or environmental risk reduction)

➤ **Good Jobs:**

- Ensure CAP programs and projects funded or subsidized with public dollars create good-paying jobs for local residents

Reaffirm Commitment to Achieving Top-Line Goals

The final plan should continue achieve or exceed the top-line targets in the draft plan:

- Reduce greenhouse gas pollution to meet state goals: by 15% by 2020 and 49% by 2035
- Use 100% clean energy citywide by 2035
- Use public transit, walking, and biking for 50% of commutes by 2035
- Reduce waste by 90%
- Achieve 35% urban tree canopy average by 2035

Additional Considerations for Environmental Review:

The environmental review for the Climate Action Plan and Alternate Scenarios should analyze:

- Impacts on conservation plan commitments
- Impacts on air quality and health, particularly in sensitive populations and areas high cumulative pollution burdens
- Compliance with the City General Plan and state laws AB32 and S-3-05
- Enforceability and achievability of the actions proposed

- How recent freeway expansions and gas power plant approvals impact the “Business As Usual” greenhouse gas projections and whether that creates need for stronger CAP actions

Process for Finalizing Plan: Improve Transparency, Public Outreach, and Information

Having the City address (or implement) the following items would assist the public to understand how the CAP (1) provide the full set of climate planning documents, including the appendices; (2) re-establish public engagement via the Energy and Environment Sustainability Task Force and other potential means; (3) hire the Sustainability Manager, Urban Forestry Manager, and Planning Department director.

Completion of the analyses and incorporation of the recommendations above would greatly increase the likelihood of public support for the adoption and implementation of the Climate Action Plan. The city of San Diego has demonstrated its willingness to lead the region’s climate planning and is poised to play a key role in this region’s contributions to combat climate change, reduce air pollution, conserve our natural resources, achieve social equity, and improve quality of life, health, economy and environment for all San Diegans.

Sincerely,

Bill Tippets
5850 Soledad Mt. Rd.
La Jolla, CA 92037

Cc:

- Mayor Kevin Faulconer (kevinfaulconer@saniego.gov)
- Council President Sherri Lightner and Councilmembers (sherrilightner@saniego.gov; lorriezapf@saniego.gov; toddgloria@saniego.gov; myrtlecole@saniego.gov; markkersey@saniego.gov; chriscate@saniego.gov; scottsherman@saniego.gov; davidalvarez@saniego.gov; martiemerald@saniego.gov)
- Mike Hansen, Director of Land Use & Environmental Policy, Office of Mayor Faulconer (mhansen@saniego.gov)
- Brian Schoenfisch, Senior Planner, Planning Department (bschoenfisch@saniego.gov)



March 20, 2015

Ms. Rebecca Malone
Associate Planner
City of San Diego Planning Department
1222 First Avenue, MS 501
San Diego, CA 92101

Sent via mail and email: dsdeas@san diego.gov

RE: Scoping for PEIR -- City of San Diego Climate Action Plan

Please accept these comments to the Scoping Plan of the PEIR for the City of San Diego's Climate Action Plan from Climate Action Campaign (CAC). CAC is a new climate watchdog organization dedicated to stopping climate change and protecting our quality of life.

We commend the greenhouse gas reduction targets of the draft Climate Action Plan – 15% below baseline for 2020 and 49% below baseline for 2035. These legally-binding targets are in line with the state's 2020 and 2050 targets and set critical precedent for other climate plans locally, statewide and nationwide. While the best available science suggests these goals may not be sufficient to protect our quality of life, public health or our life support systems, we agree that these targets are the appropriate benchmarks for this first iteration of the City's climate planning efforts. We also support the draft Plan's landmark goals, including:

- Use 100% clean energy citywide by 2035;
- Use public transit, walking, and biking for 50% of commutes by 2035;
- Reduce average vehicle commute distance by 2 miles by 2035;
- Reduce waste by 90%; and
- Achieve 35% urban tree canopy average by 2035.

These goals will not only help protect and preserve our future, but will also prove what is possible by driving technical and economic innovation and entrepreneurship to find climate solutions. Then, with proof of concepts, we can scale and replicate these solutions for national and international implications. Finally, we can ensure that San Diego is prepared to meet the needs of a 21st century economy and emerging workforce that wants clean air, clean energy and local control over life-sustaining water, food and energy systems -- as well as communities that prioritize healthy living with biking, walking and transit as real transportation alternatives.

We also join our friends and allies including Environmental Health Coalition and the San Diego Housing Federation, as well as our brothers and sisters fighting for working families, in

supporting the integration of social and environmental equity, affordable housing and middle-class job creation into all greenhouse gas reduction strategies.

Please accept the following recommendations and comments for your consideration during environmental review and the alternatives analysis to further strengthen the plan, acknowledging that our comments are hindered by not having access to the Technical Appendix:

New Action Items to Meet Goal to Reduce Average Vehicle Commute

We support the goal to reduce the average vehicle commute 2 miles by 2035 by focusing on new urban land use and transportation strategies. Unfortunately, the proposed Action items to meet that reduction goal do not seem to have the substantial evidence necessary to assure the community we can meet this goal, as borne out by the lack of enforceability for the City to implement its 2008 General Plan “City of Villages” Strategy.

In order to provide substantial evidence that the City can meet the VMT goal, we join the San Diego Housing Federation in proposing new Action items (most already in the City’s Housing Element in the City’s General Plan) that will be required to be completed and implemented, including:

- Develop Transit-Oriented Affordable Housing Policy - Phase 1
- Develop Equitable Urban Reinvestment Program centered around Transit Village Development Districts - Phase 1
- Set specific target for construction of sufficient affordable housing units near transit and jobs to achieve VMT target - Phase 1
- Require City to choose transit and active transportation above vehicle-reliant modes of transportation including freeway, roadway and highway expansions, at the City and SANDAG - Phase 1

Incorporate Climate Action Plan Goals/Targets/Actions into All Current Community Plan Updates

Recently, it has been reported that there are a host of Community Plan Update’s moving forward. It is possible that these Updates will not include the City of Villages Strategy, since the Strategy is only a planning strategy/guideline/vision in the General Plan, and not a requirement. In fact, some Community Plan Update’s may include barriers to moving forward with transit-oriented development planning, such as limits to density, height restrictions (outside of existing restrictions), new parking requirements, etc) – or barriers to achieve success of other Climate Plan goals/targets/actions. The question is how the City will ensure the Community Plan Updates appropriately include the necessary land use and transportation plans and policies to assure success of the legally binding climate goals.

It would be a mistake – and likely a community relations catastrophe – if there is not sufficient education and outreach to the Community Planning Groups about the requirements of the draft Climate Plan and how they intersect into the Community Plan Updates. It would also not make sense to pass new Community Plans that don't incorporate the goals/targets/actions of the Climate Plan. Somehow, the City must synchronize the review process of the Updates with the Climate Plan so the City can create the appropriate synergy and coordination between them.

- Coordinate Final Reviews of Pending Community Plan Updates with Final Review of the Climate Plan to Assure Success of Both

Integrate Language on Social Equity into Goals, Targets and Action Items

The draft Plan has great language committing the City to integrate social, environmental and economic equity into the goals, targets and actions of the Climate Plan. It states, in part, on page. 51,

“The identification, and therefore prioritization of CAP programs and actions for disadvantaged populations will be based on the socioeconomic characteristics of a community including the percentages of minority and low-income households. The CAP draws from SANDAG’s 2050 RTP for identification of disadvantaged communities, uniquely labeled as “Low Income and Minority” (LIM) Communities of Concern (SANDAG 2011). Using the RTP, City staff will prioritize the implementation of CAP measures for City of San Diego communities that are LIM Communities of Concern. In addition to LIM Communities of Concern, the CAP will draw upon the OEHHA CalEnviroScreen’s screening methodology to help identify San Diego communities that are disproportionately burdened by multiple sources of pollution.”

The missing link is actually integrating those identified priorities into the Action Items of the Implementation Plan, so the City can monitor and ensure success to achieve these outcomes.

- Integrate the commitment of the City in the draft CAP to prioritize communities identified in the OEHHA CalEnviroScreen and other relevant screening tools such as the SANDAG LIM Communities of Concern into all relevant Goals, Targets and Action Items (transportation, energy, energy efficiency, adaptation measures, etc.)

Evidence for Actions to Reach 100% Renewable Energy

We support and commend the City for the Goal to achieve 100% renewable energy on the citywide electrical grid by 2035, as well as the target to add additional renewable electricity supply to achieve 100% renewable electricity by 2035 (Strategy 2).

Our concern is the language for the Action item to meet this goal and target (Strategy 2, Action 2.1.) The language says “Present to City Council for consideration a Community Choice

Aggregation (CCA) *or another program* that increases the renewable energy supply on the electrical grid.” The legal standard requires that every action item have substantial evidence to reach the target. We support and agree that there are multiple examples of existing Community Choice programs that have achieved 100% renewable electricity, including Marin, Sonoma and Cincinnati. Thus, the language related to CCA has met its legal standard. On the other hand, the language “or another program” needs to be removed, as there is no legal evidence to support “another program” to achieve the target.

Further, it is critical to note that the City can only consider policies and programs that are either under the control and jurisdiction of the City (and thus they can approve and implement themselves), or policies and programs that are already in existence. The City cannot identify future possible laws, programs or policies outside of the City’s control and jurisdiction (for example, laws, programs or policies under the control of the state legislature or an outside administrative agency such as the Public Utilities Commission) as the mechanism to reach a target.

- Remove the language “or another program” from the Action 2.1 to ensure success in meeting the goal and target, and avoid a legal challenge.

Critical Need for Climate Adaptation and Resilience Planning

We support the language in the draft CAP narrative calling for the development of a stand alone climate adaptation document, but it is not included as a mandatory action item. Given the critical need for the City to reduce its vulnerability to climate impacts and enhance its local capacity to respond—especially for sensitive populations and communities – the environmental review and alternatives analysis must commit the City to adopting an Adaptation plan by 2017.

- Commit the City to adopt an Adaptation Plan by 2017

Ensuring Success During Implementation

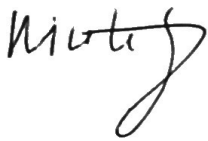
We support the Monitoring and Reporting chapter of the draft Climate Plan. We agree with the current list of actions, but we recommend an additional action item requiring the City to identify the proper staffing, financing, and funding needed to implement the plan and reach the identified goals and targets in the timelines outlined in the draft.

The City of San Luis Obispo has had great success in reallocating resources to match the bike, walk and transit goals in their Climate Action Plan, in addition to modifying the appropriate city codes and standards. The City would be wise to study and mirror their approach for transportation budgeting and planning, as well as make the necessary shifts in all relevant City departments. The City will never come close to reaching any of these targets without a fundamental shift in resource allocation.

- Add an Action Item in the Monitoring and Reporting Chapter requiring City to identify proper staffing, financing and funding to implement the goals and targets of the plan – Phase 1.

Thank you for the opportunity to submit these comments. We are pleased to help the City move forward on adoption and implementation of this groundbreaking plan. We look forward to working with you through the environmental review process to ensure San Diego remains a leader in tackling the biggest public health, environmental and economic challenge facing the City.

Sincerely

A handwritten signature in black ink, appearing to read 'Nicole', with a stylized flourish at the end.

Nicole Capretz
Executive Director

COMMUNITY FOREST ADVISORY BOARD

CITY OF SAN DIEGO



March 20, 2015

Ms. Rebecca Malone, Associate Planner
City of San Diego Planning Department
1222 First Avenue, MS 501
San Diego, CA 92101
DSDEAS@saniego.gov

Re: Public Notice of Preparation of a Draft Program Environmental Impact Report (PEIR) San Diego Climate Action Plan (CAP).

Dear Ms. Malone:

Thank you for the opportunity to comment on the preparation of a PEIR for the City's Climate Action Plan (CAP). These comments follow from the Community Forest Advisory Board's responsibilities to provide recommendations on urban forestry-related policies and programs; reviewing the implementation and compliance with urban forestry policies and programs; and advocating for funding for the establishment and maintenance of an urban forestry program.¹

The City's draft CAP includes Strategy 5 (Climate Resiliency), with targets for an Urban Tree Planting Program to achieve 15% urban tree cover by 2020 and 25% by 2035. This letter outlines considerations for the Environmental Setting, Project Description, and Impacts for these targets.

Environmental Setting

Estimates of San Diego's tree cover range from 4.2 to 7 percent, based on image type, resolution, timeframe, and type of study/author. American Forests² conducted a study of aerial imagery for San Diego comparing 30-meter (m) resolution data from 1986 and 2002, and estimated tree cover at 7 percent. In a national study by the U.S. Department of Agriculture Forest Service (USDA FS), tree canopy and impervious surface cover were estimated from maps at 30m resolution from 2001 Landsat satellite imagery and published in 2007 in conjunction with 1990 and 2000 census and geographic data (1:5,000,000 scale cartographic boundary files) to assess current urban and community forest attributes. This analysis showed that the City's tree cover is about 4.2 percent.³

¹ Community Forest Advisory Board, <http://www.sandiego.gov/economic-development/about/cfab.shtml>

² American Forests. 2003. Urban ecosystems analysis, San Diego, CA. 20 p. Available at <http://www.ufe.org/files/pubs/sandiegouea.pdf>, accessed 3/19/15.

³ Nowak, D. J.; Greenfield, E.J. 2010. Urban and community forests of the Pacific region: California, Oregon, Washington. General Technical Report NRS-65. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 38 pp. Available at http://www.nrs.fs.fed.us/pubs/gtr/gtr_nrs65.pdf, accessed 3/19/15. Data tables that include the City of San Diego at <http://nrs.fs.fed.us/data/urban/state/?state=CA>.

A current tree canopy assessment is essential to accurately describe both the Environmental Setting and the areas that trees can be planted and managed. Most cities and regional governments are developing Urban Tree Canopy Assessments (UTCA) as the foundation for many decisions about how to mitigate urban development effects on public health, energy use, city temperatures, water quality, water conservation, stormwater run-off, habitat losses, and climate change.

The City submitted a concept application in November and was invited to submit a final application (by April 30) to California Department of Forestry and Fire Protection (CalFire) for a grant that includes an UTCA. This will use high-resolution remotely-sensed Light Detection and Ranging (LiDAR) data recently obtained by the City (to a 4-inch resolution). The methods for converting the billions of LiDAR data bits into geospatial data were established with a team led by the USDA FS and have been applied to more than 70 communities to confirm current urban forestry assets and identifying places where additional investments can be made. Urban parcels are ranked on their suitability for increased tree canopy, water quality improvement and watershed management, habitat conservation, and community livability (noise and pollution reduction, urban cooling).

Project Description

The technical report needs to include a **calculation of the actions and resources to double tree cover** (from current estimate of 4 to 7 percent, to target of 15 percent). The most recent tree inventory shows that there are about 200,000 street trees in San Diego.⁴ As there is no recent inventory of trees on private land, the assumption (for this letter) is that street trees are 20% of the total trees, and therefore the rough estimate is that there are 1,000,000 trees in the City. To double the tree canopy, 1,000,000 more trees would need to be planted on public and private land.

Tree planting will require funding, education, incentives, compliance with regulations and permits, and other approaches. Larger trees need to be favored, as they provide larger canopies and sequester more carbon. Trees need to be managed, that is, watered, pruned, and protected in order to maximize their health and life span. **Tree planting opportunities** include:

- Streets and parkways, with City funding
- Parks, community centers, with City funding (few trees would be planted in canyons, as much of their acreage is committed to Multiple Species Habitat Areas for native vegetation)
- Schools, colleges, and other public properties
- State and Federal properties, including California Department of Transportation (CalTrans) rights of way and military installations
- Residential properties (front and back yards)
- Replacement of trees required in development permits (trees in parking lots, commercial properties, common areas in developments)

The City is now completing the **Urban Forest Management Plan**,⁵ that outlines the objectives, actions and resources needed to implement the Urban Forestry elements in the 2008 General Plan and the draft CAP. It includes these objectives relating to the CAP:

⁴ Streets Division completed this inventory in 2002, for trees in public rights-of-way but not in assessment districts. Data available as the "Trees_SD" database at the San Diego Association of Governments. From Mike Klein, GIS Specialist, Planning Department, personal communication, October 8, 2014.

⁵ City of San Diego, Urban Forest Management Plan, <http://www.sandiego.gov/planning/programs/urbanforest/>

- CE-J.1.2 Increase canopy cover (land area covered by trees) to optimize public benefits.
- CE-J.1.3 Develop a master tree-planting plan that encourages optimal age and species diversity.
- CE-J.1.4 Improve tree planting success.
- CE-J.1.3 Improve care and maintenance of street trees through a comprehensive management program addressing newly planted trees, mature, and large trees.
- CE-J.2.2 Prioritize community areas for public tree planting programs.
- CE-J.4.1 Develop policies that encourage and incentivize developers, homeowners associations, and other organizations to adopt trees as green infrastructure assets.
- CE-J.4.1 Increase enforcement of the city's policies and regulations related to the urban forest and consider implementing fines.
- CE-J.4.4 Use trees to shade paved areas, especially parking lots; and use trees and other landscaping to provide shade, screening, and filtering of storm water runoff.

Impacts and Benefits of Trees

The trees along streets, in parks and open space areas, and on residential and commercial properties provide many benefits to the City, its residents and visitors—they provide shade, save energy, improve air quality and public health, sequester carbon, reduce stormwater runoff, increase property values, create wildlife habitat, and enhance quality of life. Trees are one of the few infrastructure investments that grow in value over time.

Benefits of trees are well documented⁶ and include these most directly related to climate mitigation and adaptation:

- Trees absorb carbon dioxide and store carbon in wood (carbon sequestration).
- Trees insulate homes and businesses from extreme temperatures, keep properties cool, and reduce air conditioning utility bills.
- Trees reduce the “urban heat island effect.” They shade buildings, roads and sidewalks so they absorb less radiation during the day; absorb less radiation because of the color and material properties of leaves; and release moisture by evapotranspiration that cools the air.
- Shade trees return oxygen to the air, and reduce air pollution by absorbing ozone, nitrogen dioxide, sulfur dioxide, and some particulate matter.

The USDA FS and others have developed **functions to calculate the environmental benefits** provided by trees,⁷ including tons of carbon dioxide removed from the atmosphere, pounds of air pollutants captured, kilowatt-hours of energy conserved, gallons of stormwater retained, and increased property values.

Water availability, cost, and the current drought have raised concerns about planting and watering trees when water is scarce. Yet trees provide important benefits and will shade and cool for the climate warming that is predicted. Small, low water trees need only about 15-20 gallons a month

⁶ Alliance for Community Trees. 2011. Benefits of trees and urban forests: A research list. Unpublished white paper with citations of source documents, 19 pp. Available at http://www.actrees.org/files/Research/benefits_of_trees.pdf.

⁷ Benefits and economic values computed with iTree software from the USDA Forest Service, www.itreetools.org

(about one shower) and large and mature, low water trees need about 30-40 gallons a month (one load of laundry), all with deep, infrequent watering. Policies and educational messages currently do not reflect the substantial multiple benefits that trees provide.

The Community Forestry Advisory Board and many local urban forestry professionals, landscape architects, and planners are committed to enhancing the urban tree canopy and its benefits, and can contribute information and strategies to the PEIR. We recognize trees as valued City assets that provide many services to residents, businesses, and visitors, and will contribute to climate change mitigation and adaptation.

Sincerely,

A handwritten signature in black ink that reads "Anne S. Fege". The signature is fluid and cursive, with the first name "Anne" being larger and more prominent than the last name "Fege".

Anne Fege, Ph.D., M.B.A.

Chair, Community Forest Advisory Board

afege@aol.com, 858-472-1293

cc:

CFAB Board

L.Henegar and M.Garcia-City Planning Staff

Kayla Race, EDF and other community members

SD Regional Urban Forests Council

Environment-Design Council



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Rebecca Malone, Associate Planner
City of San Diego Planning Department
1222 First Ave, MS 501
San Diego, CA 92101
Via email: DSDEAS@sandiego.gov

March 20, 2015

Re: San Diego Climate Action Plan PEIR Scoping Comments- *Put Our Neighborhoods First*

Dear Ms. Malone,

Thank you for the opportunity to provide input on the Scope of Work for the City of San Diego's Climate Action Plan (CAP) Draft Programmatic Environmental Impact Report (PEIR). Since our founding in 1980, Environmental Health Coalition (EHC) has been committed to fighting toxic pollution and protecting San Diego's health, environment, and quality of life. Climate change threatens all San Diegans' right to live in healthy and resilient communities, but it impacts some neighborhoods more than others. The City should act now to reduce carbon pollution and address the disproportionate risks of climate change faced by certain neighborhoods.

We urge the City to strengthen, adopt, and implement an equitable, comprehensive, and enforceable Climate Action Plan that protects and invests first in neighborhoods that are most impacted by climate change, and cuts carbon pollution to comply with state climate laws, the City's General Plan, and City Council Resolution R-2015-68.

While we support the legally-binding greenhouse gas reduction targets and *most* top-line goals in the draft Climate Action Plan through 2035, the plan falls short in two critical areas:

1. It does not prioritize neighborhoods that are most impacted by climate change in the plan's transportation and energy actions, as called for in the CAP Social Equity chapter¹ and City General Plan² but not formalized in the CAP implementation actions; and
2. It does not do enough to reduce energy use in new and existing buildings, as called for in the City's General Plan³ and state plans.⁴

These shortcomings should be resolved in the final plan, as they are essential to ensure the CAP's equity and energy goals are achieved, and that San Diego's working families can be resilient in a changing climate, manage their utility bills, improve home health, and safely get

¹ Draft CAP, Sept 2014, Chapter 4, p52: "Prioritize programs and actions to reduce emissions in disadvantaged communities that rank in the top 25 percent of CalEnviroScreen's ranking for San Diego region communities."

² City of San Diego General Plan, Land Use Element, Environmental Justice Section LU-I.4: "Prioritize and allocate citywide resources to provide public facilities and services to communities in need. Greater resources should be provided to communities where greater needs exist." See also LU-I.3, LU-I.10, LU-I.9, LU-I.13.

³ General Plan Conservation Element and Housing Element Policies

⁴ California's Existing Buildings Energy Efficiency Action Plan, CEC, March 2015 and California's Long-Term Energy Efficiency Strategic Plan, CPUC, Jan 2011

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EMPODERANDO A LA GENTE. ORGANIZANDO A LAS COMUNIDADES. LOGRANDO LA JUSTICIA.

around the city to access jobs, health care, cooling centers, parks, and other vital resources. We further describe the need and ways to resolve these issues in our recommendations below.

I. LEGAL CONSIDERATIONS FOR REVIEW OF PROJECT AND ALTERNATIVES

The PEIR for the Climate Action Plan and Alternate Scenarios must analyze the proposals' enforceability and compliance with the General Plan and all applicable state and local laws. Enforceability is necessary because the CAP is CEQA mitigation to the General Plan and the CAP is proposed as a tiering document for future projects. Compliance with state, federal, and local laws is necessary, as the General Plan specifically commits the CAP to this.⁵ We identify below where particular attention is needed in analysis and strengthening to ensure compliance.

A. GREENHOUSE GAS EMISSIONS TARGETS AND PROJECTIONS

a. Analysis of AB32 and S-3-05 Compliance through 2035

The PEIR should analyze the CAP's compliance with state laws AB32 and S-3-05 through 2035. Recent lawsuits and court rulings on the County of San Diego's Climate Action Plan and SANDAG's Regional Transportation Plan have further solidified the legal enforceability of AB32 and S-3-05 as state laws. We believe the draft CAP's targets of 15% below the baseline for 2020 and 49% below baseline for 2035 are in line with the state's 2020 and 2050 targets and we support continued commitment to meeting these targets *at a minimum*.

b. Analysis of Business as Usual (BAU) Projections

The PEIR should analyze how recent freeway expansions (e.g. SR-94, I-5) and gas power plant approvals (e.g. Pio Pico Energy Center in Otay Mesa) impact the CAP's "Business As Usual" greenhouse gas projections and whether that creates need for stronger CAP actions to meet the 2020 and 2035 GHG targets.

B. AIR QUALITY

a. Analysis of sensitive receptors and areas of high cumulative pollution burden

The PEIR should analyze impacts from all CAP strategies and alternatives on air quality and health, particularly in sensitive populations and areas high cumulative pollution burdens, as identified by a CalEnviroScreen in the top 25% in the County. Our proposed Project Alternative (Attachment A) approach to prioritize actions in these disadvantaged areas with high cumulative pollution burden will result in improved air quality for these sensitive areas.

b. Analysis of compliance with state and federal air quality standards

The entire air basin already has a status of basic non-attainment for the federal (NAAQS) ozone standard and non-attainment for the state (CAAQS) standards for ozone, PM10 and PM2.5.⁶ New, stricter federal ozone standards will likely lead to *increased* non-compliance in San

⁵ General Plan CE-A.13 "Regularly monitor, update and implement the City's Climate Protection Action Plan to ensure, at a minimum compliance with all applicable federal, state, and local laws"

⁶ <http://www.sdapcd.org/info/facts/attain.pdf>

Diego.⁷ The PEIR should take into account the current noncompliance and potential increased noncompliance, and take action to ensure the CAP maximizes improvement in air quality-- particularly for sensitive populations in areas of high cumulative pollution burden-- by committing to enforceable transit, energy, and resilience actions first in disadvantaged areas.

C. ACTIONS & TARGETS 1.1 & 1.2 – EXISTING RESIDENTIAL AND COMMERCIAL BUILDINGS

a.1. Analysis of Actions 1.1 & 1.2- Energy Conservation & Disclosure Ordinances

The CAP and PEIR must clarify what the “Energy Conservation and Disclosure Ordinances” would entail for both nonresidential and residential existing buildings, including if, how, and when the ordinances would require actions such as:

- Disclosure of a buildings’ operational energy use alone
- Performance and disclosure of detailed audits or asset ratings (audits of the physical building efficiency such as HERS and ASHRAE versus purely operational use)
- Actual efficiency upgrades for underperforming buildings

The above questions are critical to the PEIR’s analysis of the ordinances’ impacts, effectiveness, and compliance with CEQA, state policies, and the General Plan, which commits to:

- *Maximize* energy efficiency and coordinate energy planning with *state agencies*,⁸
- Conduct *sustained* public awareness and energy conservation education,⁹ and
- Pursue *sustained* efforts towards *eliminating inefficient energy use*.¹⁰
- Implement development policies to protect public health, safety and welfare equitably among all segments of the population and address the needs of the disenfranchised.¹¹

Disclosure of energy use alone, without requiring *actual building efficiency improvements*, would be insufficient under CEQA due to the unenforceability (lack of requirements for upgrades). It would also fall far below the General Plans’ commitment to *maximize* savings, to coordinate with state targets to reduce energy use in existing homes by 40% by 2020 and reach net zero energy in 50% of commercial buildings by 2035,¹² and would likely also fall short of achieving the CAP’s energy reduction targets, of which we discuss the inadequacy in the next section. Studies on benchmarking disclosure policies in other cities show energy savings of only

⁷ <http://www.utsandiego.com/news/2015/mar/16/tp-ozone-limits-remain-tall-order/?#article-copy>

⁸ General Plan Conservation Element: CE-I.2 Coordinate City energy planning programs with federal, state, and regional agencies. Maximize energy efficiency, use of clean renewable resources, and demand response.

⁹ CE-I.13 “Promote and conduct energy conservation education.”

CE-N.2. “Maintain educational programs to sustain public awareness of the importance of resource conservation (e.g., energy, water, open space), the continued existence of long-term resource demand challenges, and specific conservation tactics that are recommended.”

CE-N.4. “Publicize voluntary water and energy conservation measures that focus on reducing waste and decreasing the possibility of rationing and other undesirable restrictions.”

¹⁰ General Plan Conservation Element: CE-I.7 Pursue investments in energy efficiency and direct sustained efforts towards eliminating inefficient energy use.

¹¹ San Diego General Plan measure LU-I.3

¹² California’s Long-Term Energy Efficiency Strategic Plan, CPUC, Jan 2011

2.4% to 3% per year; however these are short term studies, so the longevity of effects is yet unknown.¹³

Additionally, disclosure alone would fail to meet the General Plan's commitment to development policies that protect health and welfare of disenfranchised populations.¹⁴ Low-income households are disproportionately vulnerable to a higher-energy cost burden and to living in older, inefficient, and unhealthy homes:

- *Higher energy cost burden:* California households with an income that is less than half of the federal poverty guidelines (about 40% of low-income households) spend 29% of their income on utilities. The average Californian, on the other hand, spends less than 5% of household income on utilities.¹⁵
- *Higher per square foot energy cost:* Average monthly energy cost is 6.6 cents/sq. ft. in low-income multifamily homes versus 5.7 cents/sq. ft. adequate-income households.¹⁶ About half of low-income families in SDG&E territory live in multifamily buildings.
- *Older housing stock:* 58% of low-income multifamily buildings in SDG&E territory were built before 1980, which means they're more likely to be inefficient and include unhealthy materials.
- *Lack of ownership:* Low-income households in SDG&E territory are much more likely to be renters than owners (69% versus 31%). Roughly 1/3 of households in SDG&E territory are low-income.

Although there are several existing programs funded by ratepayers,¹⁷ state government,¹⁸ and federal government¹⁹ that provide free and subsidized upgrades to low-income and moderate-income households, as well middle- and upper-income households, participation is not as high as it could be for a number of reasons, including lack of awareness of the programs and of financing, lack of awareness of the benefits, lack of ownership, and lack of motivation:

- *Renters need permission of sometimes hard-to-reach or uncooperative owners:* The need for renters to obtain a signed property owner waiver forms in existing low-income programs can be a barrier to participation, since some building owners can be difficult to reach or unresponsive, and 33% of multifamily building owners admit to being unsupportive, or only supportive with conditions, of tenant participation in utility programs if it means filling out paperwork and allowing contractors to have access to the property.²⁰

¹³ A 2012 U.S. EPA study on energy benchmarking found that while 70% of participating buildings saved energy, their average level of energy savings was a mere 2.4% per year. A 2013 study of the District of Columbia's benchmarking data shows a 3% decrease annual energy use. <http://ddoe.dc.gov/node/992712>

¹⁴ LU-I.3 "Implement development policies to protect the public health, safety and welfare equitably among all segments of the population. **Address the needs of those who are disenfranchised in the process.**"

¹⁵ The Cadmus Group, *ESAP Program Multifamily Segment Study*, Prepared for PG&E, December 2013, p15

¹⁶ The Cadmus Group, *ESAP Program Multifamily Segment Study*, Prepared for PG&E, December 2013, p57

¹⁷ [Energy Savings Assistance Program](#), [Energy Upgrade California](#), [Multifamily Energy Efficiency Rebates](#), [Single-Family Affordable Solar Program](#), [Multifamily Affordable Solar Program](#)

¹⁸ Low-Income Weatherization Program, CSD <http://www.csd.ca.gov/Home/LowIncomeWeatherizationProgram.aspx>

¹⁹ Weatherization Assistance Program, <http://www.csd.ca.gov/services/residentialenergyefficiencyservices.aspx>

²⁰ The Cadmus Group, *ESAP Program Multifamily Segment Study*, December 2013, p92

- *Low awareness of financing and tenant programs:* About 65% of multifamily building owners and managers are *not* aware of any financing options that may assist with the expenses to upgrade or replace equipment and 35% have not heard of utility programs that provide income-qualified households with free equipment and energy efficiency services.²¹
- *Unwillingness to remedy health/safety threats:* Multifamily property owners and managers are often risk averse to perform health and safety (Indoor Air Quality) testing because they take on liability and disclosure requirements when threats to health or safety are discovered.²²

No household, especially vulnerable, low-income rental households should be forced to forego the multiple benefits of energy efficiency due to lack of awareness or owner non-cooperation. Requiring full audits/asset ratings to educate building owners about the costs and savings of upgrade opportunities and financing and subsidy options, *alongside requiring underperforming buildings to be upgraded* using these available programs, would protect these vulnerable populations who have been historically left behind.

a.2. Analysis of Targets 1.1 and 1.2

The PEIR should clarify the Targets 1.1 and 1.2, which appear to require a 15% reduction in only a subset of buildings and while the target number of buildings increases between 2020 and 2035, there appears to be no increasing per-building reduction target happening between 2020 and 2035. The targets are far inferior to state targets,²³ the state's energy loading order that sets conservation and efficiency as the highest priority before procuring new generation,²⁴ and does not take into account the use of increasingly efficient technology in the future.

We believe this is a typo, as it was explained to us that way during previous correspondence with City staff in which we recommended this target be corrected. We reiterate this recommendation.

b.1. Recommendation to Include in Actions 1.1 and 1.2

The most successful and legally compliant approach to ensuring long-term energy savings in existing buildings is to use an approach similar to the state's recently released Existing Buildings Energy Efficiency Action Plan,²⁵ which recommends as actions:

- Mandatory benchmarking of all commercial and multifamily buildings *as a first step*;
- Mandatory "asset ratings" (detailed audits of the physical building efficiency such as HERS and ASHRAE versus purely operational use);
- Mandatory upgrades to consistently low-performing buildings to provide a guarantee of reducing energy use; and
- Significantly increase the City's outreach and education about energy efficiency, including using peer-to-peer education as well as mass marketing.²⁶

²¹ ESAP Program Multifamily Segment Study, December 2013, p83

²² HMG, *Lessons Learned through Piloting Energy Upgrade California Multifamily Programs*, July 2013, p 13

²³ California's Long-Term Energy Efficiency Strategic Plan, CPUC, Jan 2011

²⁴ City loading order

²⁵ California's Existing Buildings Energy Efficiency Action Plan, CEC, March 2015

- Ensuring access to financing and funding, with a priority for facilitating improvements in low-moderate income properties.

b.1. Recommendation for Targets 1.1 and 1.2

- The CAP's energy efficiency *targets* should be consistent with state policies and should therefore be to reduce energy use in existing homes by 40% by 2020 and reach net zero energy in 50% of commercial buildings by 2035²⁷ or reach 50% reduction in all commercial buildings by 2035.

D. ACTION & TARGET 1.3 – MUNICIPAL ENERGY STRATEGY

a.1. Analysis of Action 1.3 Municipal Energy Strategy

The PEIR should analyze Action 1.3 for compliance with the CAP's social equity goals and the General Plan's commitments to prioritize and allocate city resources to ensure disenfranchised communities with the greatest need have access to public facilities and services.²⁸ Further clarification of and prioritization within this action is necessary to ensure such compliance.

a.2. Analysis of Target 1.3

The PEIR should analyze the noncompliance of Target 1.3 with state targets, as well as the General Plan commitment to LEED silver for remodeled and new municipal facilities,²⁹ and the state's Existing Buildings Action plan that calls for local government leadership.³⁰

b.1. Recommendation to Include in Action 1.3

- CAP and Municipal Energy Strategy should prioritize energy efficiency upgrades and renewable energy installations on municipal facilities located within disadvantaged communities identified by CalEnviroScreen.

b.1. Recommendation to Include in Action 1.3

- The City should lead by example by setting Target 1.3 to reduce energy consumption at municipal energy facilities by 50% in all municipal buildings by 2035 or reach net zero energy in 50% of municipal buildings by 2035 as called for in state targets.³¹

²⁶ California's Existing Buildings Energy Efficiency Action Plan, CEC, March 2015

²⁷ California's Long-Term Energy Efficiency Strategic Plan, CPUC, Jan 2011

²⁸ LU-I.3 "Implement development policies to protect the public health, safety and welfare equitably among all segments of the population. **Address the needs of those who are disenfranchised in the process.**"

LU-I.4. **Prioritize and allocate citywide resources** to provide public facilities and services **to communities in need. Greater resources should be provided to communities where greater needs exist.**

LU-I.6. Provide equal access to public facilities and infrastructure for all community residents.

²⁹ General Plan CE-A.6 Design new and major remodels to City buildings, and where feasible, long term building leases for City facilities, to achieve at a minimum, the Silver Rate goal identified by LEED.

³⁰ California's Existing Buildings Energy Efficiency Action Plan, CEC, March 2015

³¹ California's Long-Term Energy Efficiency Strategic Plan, CPUC, Jan 2011

E. ACTION 2.2 – NEW BUILDINGS’ ENERGY USE

a. Analysis of Action 2.2

The PEIR should analyze the failure of CAP Action 2.1 to comply with the legally binding commitments in the City’s General Plan’s Conservation Element, Housing Element, and Mitigation and Monitoring Reporting Program to implement standards for new buildings and significant remodels to maximize efficiency and *specifically achieve net zero energy consumption* in new buildings.³² The PEIR should rectify this noncompliance. The PEIR should also analyze Action 2.2’s consistency with state targets that all new residential construction be net zero energy by 2020 and all new commercial construction be net zero by 2030.³³

b. Recommendation to Include in Action 2.2

- Require new buildings and major renovations/remodels to have on-site clean energy such as solar meet their electricity needs, as the City’s General Plan calls for.

F. ACTION 2.1 – CCA OR OTHER PROGRAM TO ACHIEVE 100% RENEWABLE ENERGY

a. Analysis of Action 2.1

We strongly support target 2.1 to achieve 100% clean energy citywide by 2035 and believe this to be an achievable target if implemented properly, as demonstrated in other jurisdictions. In order to ensure this target is achieved, meets CEQA requirements, and fulfills the CAP’s social equity and job creation goals, that the City must have control over any solution proposed and provide certainty the target will be met.

The PEIR should therefore examine if community choice aggregation or “another program”, as proposed in the plan, would provide the necessary enforceability and City control for achievement of the 2035 target.

The PEIR should additionally analyze Action 2.1’s consistency with:

- The CAP’s Social Equity target to prioritize disadvantaged communities for emissions reduction actions and programs;³⁴
- The CAP’s job creation goal to “provide support to disadvantaged communities and promote equitable job growth and economic opportunity;³⁵ and

³² General Plan Conservation Element CE-A.5: “Develop and *implement sustainable building standards* for *new and significant remodels* of *residential and commercial* buildings *to maximize energy efficiency*, and to *achieve overall net zero* energy consumption by 2020 for new residential buildings and 2030 for new commercial buildings.”

General Plan Housing Element: “HE-J.8 **Require net-zero energy for new residential buildings** by the year 2020 to meet the State’s goal outlined in the Long-Term Energy Efficiency Strategic Plan.”

³³ California Energy Efficiency Strategic Plan, CPUC, Jan 2011

http://www.energy.ca.gov/ab758/documents/CAEnergyEfficiencyStrategicPlan_Jan2011.pdf

³⁴ CAP, p52

³⁵ CAP, p52

- The General Plan’s commitments to:
 - Use small, decentralized, and appropriately-sited energy efficient power;³⁶ and
 - Prioritize and allocate city resources to ensure disenfranchised communities with the greatest need have access to public facilities and services.³⁷

b. Recommendation to Include in Action 2.1

Programs to achieve the 100% clean energy target should:

- Facilitate solar installation in neighborhoods who are most impacted by climate change
- Commit to the state’s energy loading order of conservation, efficiency, and local distributed clean energy before other energy procurement
- Provide the City a guarantee for achievement of the target
- Facilitate the creation of good jobs for local residents

F. ACTION 3.1, 3.2, 3.3, & 3.9: BICYCLING, WALKING, TRANSIT, AND LAND USE

a. Analysis of Actions 3.1, 3.2, 3.3, 3.9

We strongly support the targets to achieve 50% of commuter mode share via bicycling, walking, and transit by 2035 (Targets 3.1-3.3). We urge the PEIR and CAP to define a “commute” not simply as trips between home and the workplace, but also as trips to important resources such as grocery stores, health care, schools, and recreational activities. We believe the target to be achievable with the appropriate shift in City and SANDAG expenditures, actions, and project and policy approvals.

In order to ensure the final CAP transportation targets 3.1, 3.2, 3.3, and 3.9 are achieved and the strategy meets the requirements of CEQA, the General Plan, and the final CAP’s social equity and job creation goals, the PEIR must analyze consistency with General Plan’s commitments to:

- Improve mobility and accessibility for the non-driving elderly, disabled, and low income populations;³⁸
- Prioritize and allocate city resources to ensure disenfranchised communities with the greatest need have access to public facilities and services;³⁹
- Design transportation projects so that the resulting benefits and potential burdens are equitable;⁴⁰

³⁶ General Plan, CE-I.12 “Use small, decentralized, aesthetically-designed, and appropriately-sited energy efficient power generation facilities to the extent feasible”

³⁷ General Plan, LU-I.3, LU-I.4, and LU-I.6.

³⁸ General Plan, LU-I.10 “Improve mobility options and accessibility for the non-driving elderly, disabled, low income and other members of the population.”

³⁹ General Plan, LU-I.3, LU-I.4, and LU-I.6.

⁴⁰ LU-I.9. Design transportation projects so that the resulting benefits and potential burdens are equitable. Some of the benefits of transportation programs include improved accessibility, faster trips, more mobility choices, and reduced congestion. Common negative consequences include health impacts of air pollution, noise, crash-related injuries and fatalities, dislocation of residents, and division of communities.

- Eliminate disproportionate environmental burdens and pollution experienced by historically disadvantaged communities;⁴¹ and
- Reduce vehicle-miles-travelled (VMT) and increasing the use of transit, walking and biking throughout, both through the City's policies, funding, and project approvals, as
- Use the City's position on SANDAG to adopt an RTP that is consistent with these mode-shift goals.⁴²

The PEIR and CAP should use CalEPA's CalEnviroScreen tool to analyze and identify which communities have the greatest need, are historically disadvantaged and face disproportionate environmental burdens. Census tracts ranking in the top 25% of CalEPA's CalEnviroScreen scores within the County should be deemed to meet the above criteria and should be prioritized for transit-supporting and active transportation infrastructure funds. Attachment B is a map showing where these CalEnviroScreen areas overlap with SANDAG's Transit Priority Areas.

On top of CalEnviroScreen scores, the PEIR and CAP should use the City's 2014 Comprehensive Pedestrian Safety Study to further identify and prioritize high need for alternative transportation infrastructure in areas with a higher risk of pedestrian and bicycling collisions with motor vehicles. This study shows residents in low-income neighborhood are ten-times more likely to be hit by a car as a pedestrian residents living in more affluent neighborhoods.⁴³ Attachment C is a map showing where these high-collision-risk areas are.

Finally, we join the San Diego Housing federation in calling for the PEIR to analyze what additional enforceable implementation strategies and actions are needed to ensure reduction of vehicle miles travelled (VMT), including additional affordable housing in transit-oriented development. At the same time, it is important to avoid exposing affordable housing residents to excess air pollution levels and other hazardous materials that would be experienced should these projects be located near freeways and major roadways. Affordable housing sited appropriately near transit and away from major pollution sources can reduce VMT and transportation costs for low-income households-- who experience a higher transportation cost-burden than more affluent households-- as well as improve access to jobs and other resources necessary for being resilient in a changing climate.

⁴¹ LU-I.13. Eliminate disproportionate environmental burdens and pollution experienced by historically disadvantaged communities.

⁴² ME-C-2 "Provide adequate capacity and reduce congestion for all modes of transportation on the street and freeway system. (f) Evaluate RTP proposals for new or redesigned streets and freeways on the basis of demonstrated need and consistency with General Plan policies and community plan facility recommendations."

⁴³ Citywide Pedestrian Collision Analysis: City of San Diego Comprehensive Pedestrian Safety Study. Revised 4/28/2014. <http://www.sandiego.gov/tsw/pdf/pedestriansafetystudy/pedcollisionanalysis.pdf>

b. Recommendation to Include in Action 3.1, 3.2, 3.3, 3.9

- Prioritize neighborhoods that are most impacted by climate change, as identified by CalEnviroScreen, for funding and projects that improve bicycling and pedestrian infrastructure and transit access.⁴⁴ Areas identified as high risk for pedestrian and bicycling collisions should be the highest priority within these communities (i.e., El Cajon Boulevard, University Avenue, Market Street, Imperial Avenue, and Euclid Street).⁴⁵
- Commit City funds to improve bicycling and pedestrian infrastructure citywide and access to transit, prioritizing disadvantaged communities. The amount of funds should be sufficient to ensure the CAP's mode-share goals are met or exceeded. The share of funds should *at a minimum* match CAP's mode-share goals and be adjusted upward periodically to ensure achievement of the goals.
- Commit City support for a Regional Transportation Plan that funds transit and active transportation projects *before* freeways.
- Commit to significantly increase affordable housing units near transit stops and jobs to reduce vehicle miles travelled and increase equity, while avoiding exposing affordable housing residents to excess air pollution levels and other hazardous material.

G. STRATEGY 5 - CLIMATE RESILIENCY

a. Analysis of Strategy 5

We support Target 5.1 to achieve 35% urban tree canopy average by 2035 and recommend the PEIR analyze the consistency of Action 5.1 and Target 5.1 with General Plan commitments and CAP Social Equity targets to prioritize disadvantaged communities most in need for actions, programs, and resources.

Additionally, while the CAP acknowledges the need for developing a stand-alone climate adaptation plan, it does not provide a deadline for adopting such a plan. There is a critical need for the City to better assess risks to our infrastructure, health, safety, and natural resources and take calculated action to reduce greater costs in the future, reduce vulnerability to climate impacts, prioritize limited resources where they will be most needed, and enhance local capacity to respond—especially for disadvantaged populations and communities. The PEIR and CAP must commit the City to adopting an Adaptation plan.

b. Recommended to Include in Strategy 5

- Increase trees and parks in disadvantaged neighborhoods first.
- Commit to adopting an actionable climate adaptation plan by 2017 that protects natural resources, wildlife, our coastline, infrastructure, and public health and safety.

⁴⁴ See Attachment B map

⁴⁵ See Attachment C map

H. CHAPTER 4 - SOCIAL EQUITY AND JOB CREATION

We strongly support the CAP's commitment to *prioritize programs and actions to reduce emissions in disadvantaged communities that rank in the top 25 percent of CalEnviroScreen's ranking for San Diego region communities.*

Recommendation:

- We urge the CAP and Alternatives to integrate this social equity goal throughout the strategies in Chapter 3, as identified in our comments in prior sections and in our project alternative recommendation.

We also support the CAP's existing job equity and job quality commitments to:

- Provide support to disadvantaged communities and promote equitable job growth and economic opportunity,⁴⁶
- Include in CAP programs performance goals and data tracking for quality of jobs created and the demographic and geographic distribution of workers;⁴⁷ and
- Ensure all climate work done through City programs comply with the City's prevailing wage ordinance.⁴⁸

The PEIR's economic analysis should examine impacts to local economy from creating clean energy and transit jobs. The analysis should examine not only the number of jobs but the potential geographic and demographic distribution of workers, and quality of jobs. We believe our recommendations to prioritize CAP actions in disadvantaged neighborhoods and integrate social equity, job equity and job quality throughout the CAP actions will show in the economic analysis the potential to create the greatest net benefit.

Recommendation:

- We urge the City to ensure these job equity and job quality goals are integrated into all CAP programs and projects that are funded or subsidized with public dollars, and that the goals are enforceable.

II. PROJECT ALTERNATIVES

The CAP environmental review should analyze and endorse an Alternate Scenario that strengthens the plan to comply with the General Plan and state policies, and integrates social and environmental equity into all of the greenhouse gas reduction strategies, using our recommendations in Section I, which are also provided as tracked changes to the September 2014 Draft CAP in the Attachment A.

⁴⁶ CAP, p52

⁴⁷ CAP, p52

⁴⁸ CAP, p52

III. PROCESS FOR FINALIZING & IMPLEMENTING THE CAP: IMPROVE TRANSPARENCY, OUTREACH, AND INFORMATION

We are disappointed by (1) the absence of the full climate planning documents, including the appendices; (2) inadequate public engagement via the Task Force and other potential means; (3) the delay in hiring a Sustainability Manager, an Urban Forestry Manager, and Planning Department director. We are eager to see this process improve in transparency and public engagement as the plan and implementation proceed.

CONCLUSION

With the analysis and incorporation of our recommendations above, we look forward to supporting the adoption and implementation of the Climate Action Plan, so San Diego can do its part to combat climate change, reduce air pollution, achieve social equity, and improve quality of life, health, economy and environment for all San Diegans, including those most impacted.

Sincerely,

A handwritten signature in black ink that reads "Kayla Race". The signature is fluid and cursive, with the first name "Kayla" being more prominent than the last name "Race".

Kayla Race
Policy Advocate
kaylar@environmentalhealth.org
619-474-0220 x133

Cc:

- Mayor Kevin Faulconer
- Council President Sherri Lightner and Councilmembers
- Mike Hansen, Director of Land Use & Environmental Policy, Office of Mayor Faulconer
- Brian Schoenfisch, Senior Planner, Planning Department

ATTACHMENT A

CAP ALTERNATIVE SCENARIO RECOMMENDATIONS **RECOMMENDED MODIFICATIONS TO SEPTEMBER 2014 DRAFT**

STRATEGY 1: ENERGY AND WATER EFFICIENT BUILDING

Target 1.1 Reduce energy use by 15% per square foot in 26% of total non-residential square feet by 2020 and reach zero net energy (ZNE) in 53% of total square feet by 2035 (or 50% reduction in energy use per square foot in 100% of non-residential square footage by 2035).

Target 1.2 Reduce energy use by 40% ~~15% per unit in 20% of~~ in residential housing units by 2020 and by 50% of units ~~of units~~ by 2035.

Action 1.1 and 1.2 (Efficiency in Existing Buildings): Present to City Council for consideration a non-residential (Action 1.1) and residential (Action 1.2) Energy and Water Conservation and Public Disclosure Ordinance that requires property owners to:

- (a) Publicly disclose energy use and key building characteristics typical in “benchmarking” programs and policies
- (b) Conduct and publicly disclose “asset ratings” (Detailed audits of the physical building efficiency such as HERS and ASHRAE, that provide actionable recommendations for upgrades with costs and benefits, packaged with incentives and financing options);
- (c) Require underperforming properties to implement efficiency improvements within a set period of time.

Ordinance may be phased in by buildings size, age, energy use, or energy performance, and requirements may be triggered at specific dates, at points of transaction, or at other major events for buildings.

Supporting Measure (Financing) (p36): Pursue additional financial resources and incentives, including but not limited to funds from the California Greenhouse Gas Reduction Fund, ratepayer funds via a Regional Energy Network or SDG&E Local Government Partnership, and U.S. Housing and Urban Development and Department of Energy grants, for local programs to assist low and moderate income households and businesses with implementing energy and water efficiency measures identified by the conservation and disclosure ordinances, and to promote the expansion of greywater systems.

Target 1.3 Reduce energy consumption at municipal facilities by 15% by 2020 and an additional 25% ~~50%~~ by 2035.

Action 1.3 (Efficiency in Municipal Buildings) Present to City Council for consideration a Municipal Energy Strategy and Implementation Plan that prioritizes efficiency and renewable energy upgrades on properties in census tracts ranking in the top 25% of CalEnviroScreen scores in the County.

STRATEGY 2: CLEAN AND RENEWABLE ENERGY

Action 2.1 (Renewable Energy Citywide): Present to City Council for consideration a Community Choice Aggregation (CCA) or another comparable enforceable program that increases renewable energy supply on the electrical grid to achieve the 2035 100% renewable energy target and prioritizes local resources in disadvantaged communities and good-paying jobs for local residents.

Supporting Action: City will explore the option of utilizing a Green Tariff Shared Renewables Program as established by SB43 renewable energy credits (RECs) to contribute towards the 100% renewable energy target. (p37)

Action 2.2 (New Buildings' Energy Use): Present to City Council for consideration an ordinance to Implement General Plan Policy CE-A5 to achieve net zero energy consumption by requiring new residential and non-residential construction to install renewable energy to meet the property's electricity demand, conduit for future photovoltaic and electric vehicle charging stations, and install plumbing for future solar water heating to meet the property's water heating needs.

STRATEGY 3: BICYCLING, WALKING, TRANSIT, AND LAND USE:

Transit Priority Areas Definition (p38): The City defines a "transit priority area" as: (1) a census tract within the City that ranks in the top 25% of CalEPA's CalEnviroScreen scores within the County, or (2) an area within one-half mile of a "major transit stop"* or high quality transit corridor that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in SANDAG's Urban Transit Area Strategy's transit propensity network or an adopted Transportation Improvement Program or Regional Transportation Plan, as stated in Public Resources Code § 21099(a)(7);

The City shall prioritize planning and funding to achieve the CAP's transit, walking, and biking goals in the following order:

1. Areas that meet both of the city's criteria for a transit priority area (Meets the Public Resources Code § 21099 (a) (7) definition AND is in a census tract in the City that ranks in the top 25% of CalEPA's CalEnviroScreen scores within the County.
2. Census tracts in the City that rank in the top 25% of CalEPA's CalEnviroScreen scores within the County.
3. Meets the Public Resources Code § 21099(a)(7) definition of a transit priority area

(*A major transit stop is defined in Public Resources Code § 21064.3 as a site containing an existing rail transit station, or the intersection of two or more major bus routes with a

frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods).

Transit Priority Areas Rankings, Supporting Measure (p41): Develop new priority ranking for planning and funding infrastructure improvements and maintenance that support achieving CAP transit, pedestrian, and bicycling goals in Transit Priority Areas, using the following prioritization order:

1. Areas that meet both of the city's criteria for a transit priority area (Meets the Public Resources Code § 21099 (a)(7) definition AND is in a census tract in the City that ranks in the top 25% of CalEPA's CalEnviroScreen scores within the County.
 - a. Areas identified as high risk for pedestrian and bicycling collisions should be the highest priority within these communities.
2. Census tracts in the City that rank in the top 25% of CalEPA's CalEnviroScreen scores within the County.
3. Meets the Public Resources Code § 21099(a)(7) definition of a transit priority area

This priority ranking system shall be integrated into the Capital Improvement Priority Matrix (Policy 800-14), for mobility assets and shall apply to all eligible sources of capital improvements funds, including but not limited to, revenue generated by TransNet, CDBG opportunities and Public Facilities Financing Plans (DIF/FBA), as well as any General Fund revenue allocated to the capital improvement program budget.

This priority ranking system shall also commit City funds for biking, walking, and transit supporting infrastructure in an amount sufficient to ensure the CAP's mode-share goals are met or exceeded. The share of funds should at a minimum match CAP's mode-share goals and be adjusted upward periodically to ensure achievement of the goals.

Action 3.1 (Transit): Implement the General Plan's Mobility Element and the City of Villages Strategy in Transit Priority Areas to increase the use of transit, prioritizing implementation in census tracts in the City ranking in the top 25% of CalEPA's CalEnviroScreen scores within the County.

Action 3.2 (Walking): Implement the City of San Diego's Pedestrian master Plan in Transit Priority Areas to increase commuter walking opportunities, prioritizing implementation areas that are located in in census tracts in the City ranking in the top 25% of CalEPA's CalEnviroScreen scores within the County and are at high risk for collisions between pedestrians and motor vehicles.

Action 3.3 (Bicycling): Implement the City of San Diego's Bicycle Master Plan to increase commuter bicycling opportunities, prioritizing implementation areas that are located in census tracts in the City ranking in the top 25% of CalEPA's CalEnviroScreen scores within the County and are at high risk for collisions between bicycles and motor vehicles.

Action 3.4 and 3.5 (Traffic Efficiency): Implement a Traffic Signal Master Plan (Action 3.4) and a Roundabouts Master Plan (Action 3.5) to reduce vehicle fuel consumption and improve safety and mobility, prioritizing corridors that have the highest pedestrian collision rates and are in census tracts ranking in the top 25% of CalEPA's CalEnviroScreen scores within the City.

New Supporting Measure: The City of San Diego's two voting representatives on the SANDAG Board shall vote and take other decision-making actions at SANDAG that are consistent with the CAP goals, the SANDAG Urban Area Transit Strategy (UATS) goals for regional and city transit connectivity and City Resolution R-2011-966 goals, which directs:

1. That the RTP prioritize public transportation and mass transit projects and minimize the expansion of single-vehicle general purpose highway lanes.
2. That the RTP advance the timeline of funding for key commute routes, improving transit frequency, and active transportation projects.
3. That the RTP provide greater clarity about how greenhouse gas emissions Development reduction targets are being met in the long term, specifically how the aims of SB375 will be met through the life of the Plan out to 2050.
4. That the Sustainable communities Strategy consider implementing concepts such as "Safe Routes to Transit" program, prioritizing a "transit First" system of projects, and ensuring that a Transit-Oriented strategy is developed to link mass transit with affordable housing development.

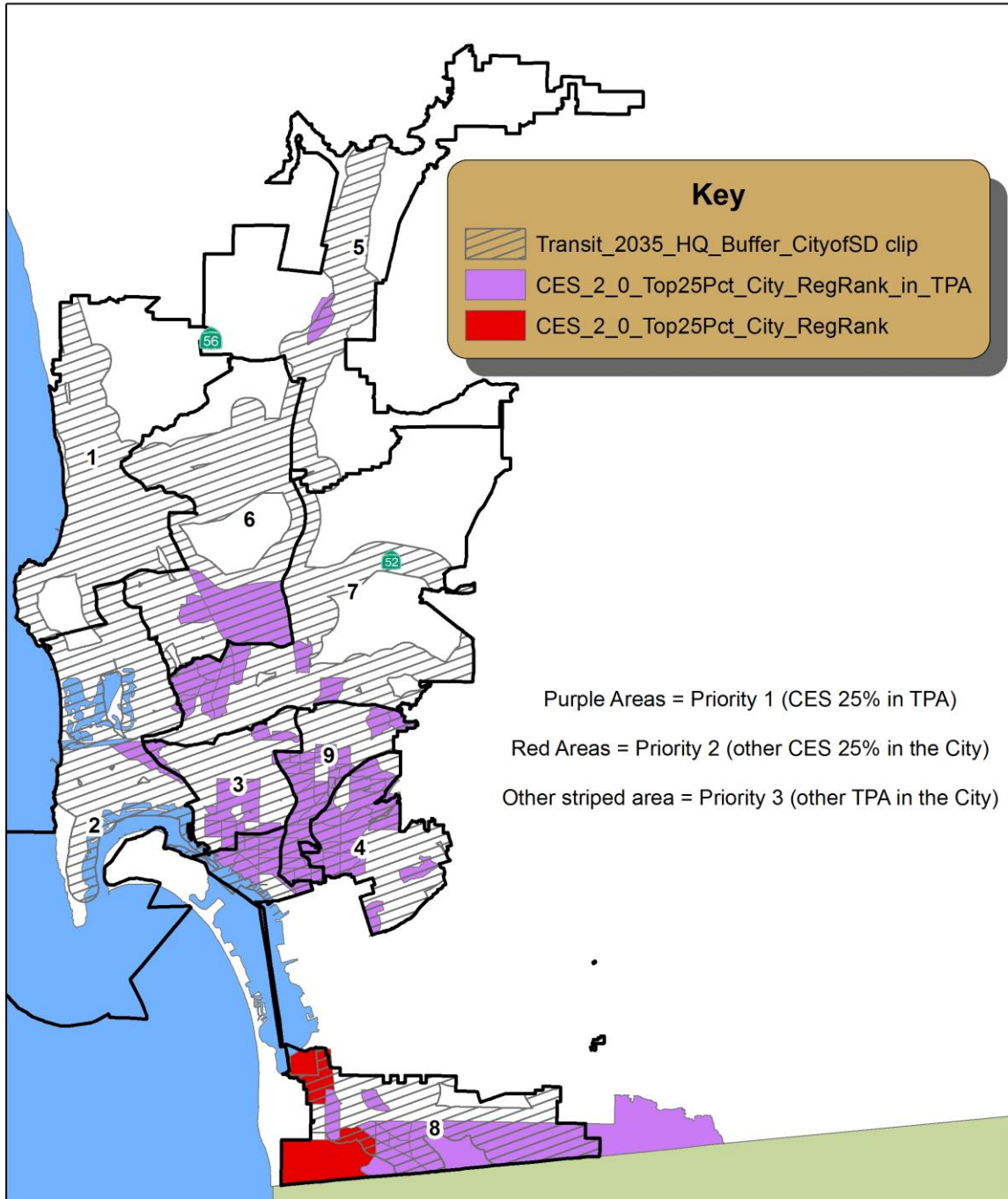
STRATEGY 5: CLIMATE RESILIENCY

Action 5.1 Present to City Council for consideration a city-wide Urban Tree Planting and Urban Parks Program that prioritize implementation in areas in census tracts ranking in the top 25% of CalEPA's CalEnviroScreen scores within the County.

New Action Commit to completing a full climate adaptation plan by 2017 to identify the greatest risks to our infrastructure, environment, and public health—especially in the City's most vulnerable communities—and plan to address those risks.

ATTACHMENT B – Transit Infrastructure Prioritization Recommendations

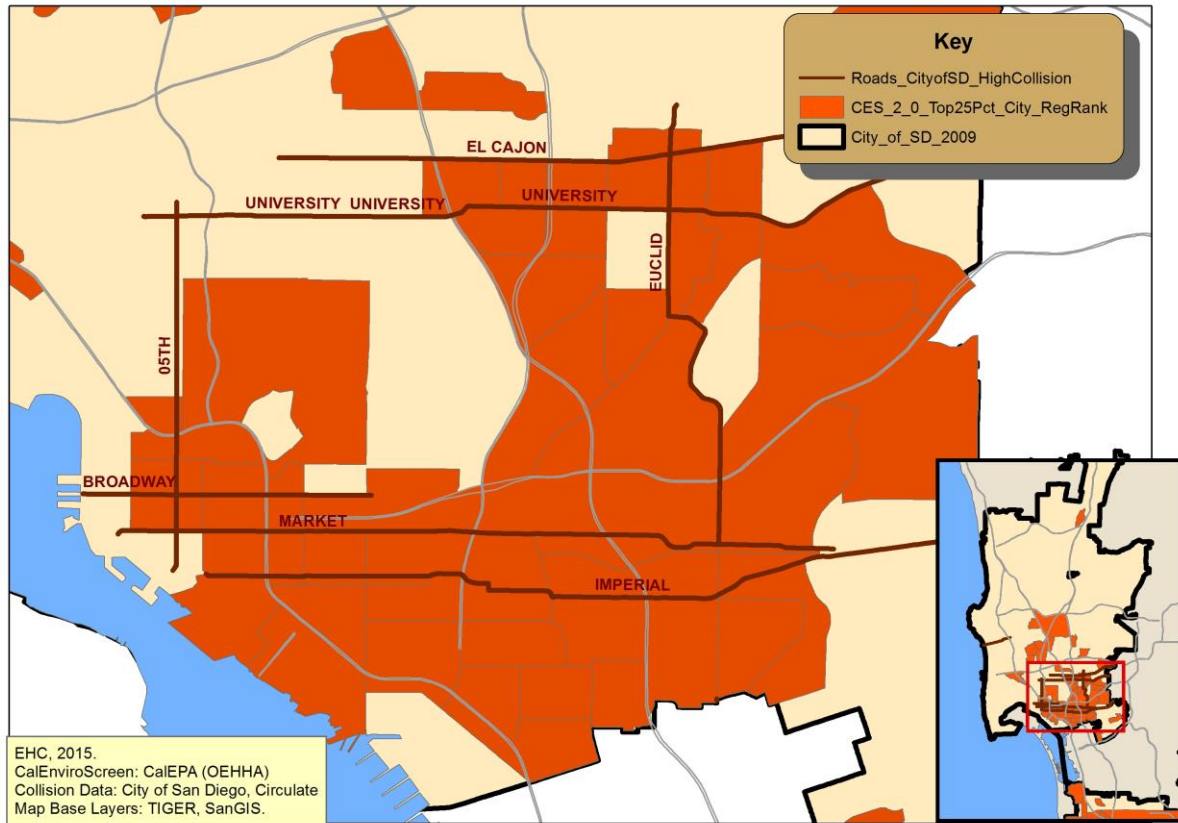
CalEnviroScreen2_0 Top 25%, City of San Diego Ranked within the Region, and Overlap with SANDAG 2035 Transit Project Priority Areas



EHC, 2014.
Sources: CalEPA (OEHHA), SANDAG
Map Base Layers: TIGER, SanGIS.

**ATTACHMENT C –
High Collision Risk Areas for Transit Infrastructure Prioritization Recommendations**

**CalEnviroScreen2_0, Top 25% Regionally within City of San Diego,
and High-Collision Traffic Corridors**





March 20, 2015

Rebecca Malone, Associate Planner
City of San Diego Planning Department
1222 First Ave, MS 501
San Diego, CA 92101

Via email: DSDEAS@sandiego.gov

**Re: SanDiego350 Scoping Comments on the City of San Diego Climate Action
Plan Programmatic Environmental Impact Report**

Dear Ms. Malone,

SanDiego350 is committed to protecting San Diego's health, environment, and quality of life. Climate change threatens all San Diegans' right to live in healthy and resilient communities, but it impacts some neighborhoods more than others. The City should act now to reduce carbon pollution and address the disproportionate risks of climate change in certain neighborhoods.

SanDiego350 represents over 4,000 concerned individuals from all walks of life advocating for action on climate change, energy efficiency, and distributed generation within San Diego County and California. We advocate for renewable energy, environmental stewardship and local sustainability, and policies that will increase energy efficiency, mass transit, and create environmentally friendly cities. In particular, we are pleased that through the Climate Action Plan (CAP), the City is committing to 100% renewable energy by 2035, through enforceable measures that will meet state greenhouse gas (GHG) reduction targets (AB 32, S-3-05). We support the CAP's commitment to these top-line goals:

- Reduce GHG pollution to meet state goals: by 15% by 2020 and 49% by 2035;
- Use 100% clean energy citywide by 2035;
- Use public transit, walking, and biking for 50% of commutes by 2035;
- Reduce waste by 90%; and
- Achieve 35% urban tree canopy average by 2035.

However, the CAP is written to meet GHG reductions goals that, when passed in 2005 and 2006, were based on the best known science of the impacts of climate change at that time. However, scientists now state that an even more aggressive stance toward reducing emissions is needed, based on the observed effects of climate change, updated predictions and modeling, and the lack of political action on climate change on a global scale. Therefore, although the CAP only needs to meet state required reductions, it will be in the best interest of the City of San Diego to take a more aggressive stance, and reduce emissions beyond what is legally required.

We would like to take this opportunity to provide comments on the scoping period for the CAP.

We urge the City to strengthen, adopt, and implement an equitable, comprehensive, and enforceable Climate Action Plan that protects and invests first in neighborhoods which are most impacted by climate change, and cuts carbon pollution to comply with state climate laws, the City's General Plan, and City Council Resolution R-2015-68.

While we support the GHG reduction and top-line goals in the draft Climate Action Plan, the plan falls short in two critical areas: (1) It does not prioritize neighborhoods that are most impacted by climate change for transportation and energy actions; and (2) It does not do enough to reduce energy use in new and existing buildings. These shortcomings should be resolved in the final plan, as they are essential to ensure San Diego's working families can be resilient in a changing climate, manage their utility bills, improve home health, and safely get around the city to access jobs, healthcare, cooling centers, parks, and other vital resources.

Specific Comments on the CAP

Renewable Energy: Action 2.1 ("Present to City Council for consideration a Community Choice Aggregation (CCA) or another program that increases the renewable energy supply on the electric grid"). The City needs to determine through California Environmental Quality Act (CEQA) review whether "another program," as described above in Action 2.1, would actually be enforceable and achievable. The City is committing to 100% renewable energy, and a different program that is *not under the direct control of the City* would not be enforceable and therefore not an adequate CEQA mitigation option as required by the City's General Plan (2008).

We suggest that the City removes "or another program" from Action 2.1 as it does not meet the legal standards required of a CEQA document as currently written.

Animal Agriculture: Although energy and transportation are major contributors to GHG emissions, animal agriculture is responsible for 35% of methane and 65% of nitrous oxide emissions, which trap substantially more heat than carbon dioxide. Globally, animal agriculture is responsible for more emissions than all forms of transportation combined (UN FAO), with one more recent study finding it is responsible for up to 51% of total emissions (UN WorldWatch Institute). In not addressing animal agriculture, and more specifically, the demand for it by San Diego residents and businesses, as a substantial source of GHG emissions as well as water consumption and pollution, the CAP has a significant environmental impact that is currently not adequately analyzed.

Mitigation to less than significance could be achieved by adding an education component to inform San Diego residents and businesses about how reducing their consumption of meat, dairy and eggs will significantly reduce GHG emissions and depletion of potable water

resources in their production, as well as 30% of food waste in landfills which generates methane. The mitigation measure should also include assessment of effectiveness in reducing consumption of meat, dairy and eggs.

Water Use: Transporting water to San Diego County for use in our residences, businesses, and commercial sectors requires a vast amount of energy. The City is moving forward with the Pure Water Program which will be a benefit for our arid region, but will result in high emissions if water conservation programs are not taken seriously by the City, its residents, and its businesses.

Potential mitigation measures that should be included are expanding the use of gray water in existing housing, installing plumbing for gray water systems in all new construction, and limiting the number of high water crops (including animal agriculture) that are permitted in the City of San Diego.

Public Education:

There is an immense need for the public to be educated about climate change, and the real impacts that it is having on our neighborhoods, communities, and our future. People will be more likely to embrace the changes required by the CAP if they understand why we must act on climate change. The CAP is a perfect opportunity for the City to conduct public education. We would like to see public education incorporated into the plan and its implementation. This is a strategy that should begin today.

The Climate Action Plan's environmental review should analyze and endorse an Alternate Scenario that strengthens the plan to achieve:

Transportation Justice: Improve access, affordability, public health, safety, and equity

- Commit City funds to improve bicycling and pedestrian infrastructure citywide and increase access to transit, starting in neighborhoods which are most impacted by climate change, as identified by CalEnviroScreen. The amount of funds should meet or exceed the CAP's mode-share goals, and be adjusted periodically to ensure achievement of goals.
- Commit City support for a Regional Transportation Plan that funds transit *before* freeways.

Energy Justice: Close the 'green divide,' increase solar and efficiency in buildings

- Facilitate solar installation in neighborhoods who are most impacted by climate change.
- Require new buildings to have on-site clean energy such as solar meet their electricity needs, as the City's General Plan calls for.
- Require existing, inefficient buildings to conduct energy audits and efficiency improvements, while ensuring access to financing and funding, to implement the General Plan. Prioritize facilitating improvements in low-moderate income properties.

- Upgrade city properties with solar and efficiency in neighborhoods most impacted by climate change.

Good Jobs:

- Ensure CAP programs and projects funded or subsidized with public dollars create good-paying jobs for local residents

Climate Adaptation and Resilience

- Commit to adopting an actionable climate adaptation plan by 2017 that protects natural resources, wildlife, our coastline, infrastructure, and public health and safety.
- Increase trees and parks in disadvantaged neighborhoods first.

Additional Considerations for Environmental Review:

The environmental review for the Climate Action Plan and Alternate Scenarios should analyze:

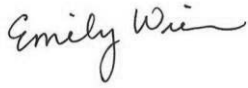
- Impacts on air quality and health, particularly in sensitive populations and areas high cumulative pollution burdens, as identified by CalEnviroScreen.
- Compliance with the City General Plan and state laws AB32 and S-3-05
- Enforceability and achievability of the actions proposed
- Consistency with regional planning documents, including the Multiple Species Conservation Program (MSCP)
- How recent freeway expansions and gas power plant approvals impact the “Business As Usual” GHG projections and whether that creates need for stronger CAP actions.

Process for Finalizing Plan: Improve Transparency, Public Outreach, and Information

We are disappointed by (1) the absence of the full climate planning documents, including the appendices; (2) lack of recent public engagement via the Task Force and other potential means; (3) the delay in hiring a Sustainability Manager, an Urban Forestry Manager, and Planning Department director. We are eager to see this process improve in transparency and public engagement as the plan and implementation proceed.

Thank you for your consideration of our comments. Climate change is a critical issue facing the San Diego region, and we are pleased that the City is moving forward with a Climate Action Plan that reaffirms its commitment to combating climate change, reducing air pollution, working towards social equity, and improving the quality of life, health, economy and environment for all San Diegans. We look forward to working with the City during the environmental review process, and in the plans’ adoption and implementation.

Sincerely,



Emily Wier
Steering Committee Member
SanDiego350

Cc:

- Mayor Kevin Faulconer (kevinfaulconer@sandiego.gov)
- Council President Sherri Lightner and Councilmembers (sherrilightner@sandiego.gov; lorriezapf@sandiego.gov; toddgloria@sandiego.gov; myrtlecole@sandiego.gov; markkersey@sandiego.gov; chriscate@sandiego.gov; scottsherman@sandiego.gov; davidalvarez@sandiego.gov; martiemerald@sandiego.gov)
- Mike Hansen, Director of Land Use & Environmental Policy, Office of Mayor Faulconer (mhansen@sandiego.gov)
- Brian Schoenfisch, Senior Planner, Planning Department (bschoenfisch@sandiego.gov)

Rebecca Malone, Associate Planner
City of San Diego Planning Department
1222 First Ave, MS 501
San Diego, CA 92101

Re: San Diego Climate Action Plan Scoping Comments - *Put Our Neighborhoods First*

Dear Ms. Malone,

As a champion of self-sufficiency for families living in poverty, MAAC has endeavored for 50 years to maximize the opportunities available to San Diego's most vulnerable populations and minimize the challenges they face. It is with this lense that MAAC has entered the conversation about protecting San Diegans' health, environment and quality of life. We don't want the communities that we serve to be overburdened by the long-term, negative impacts of climate change and ask that the City act now to reduce carbon pollution and address the disproportionate risks of climate change faced by certain neighborhoods.

We urge the City to strengthen, adopt, and implement a comprehensive, equitable, and enforceable Climate Action Plan that protects and invests first in neighborhoods that are most impacted by climate change, and cuts carbon pollution to comply with state climate laws, the City's General Plan, and City Council Resolution R-2015-68.

While we support the greenhouse gas reduction and top-line goals in the draft Climate Action Plan, we feel the plan can do more to prioritize neighborhoods that are most impacted by climate change. More specifically, we would the Climate Action Plan to be strengthened as follows:

- **Transportation Justice: Improve access, affordability, public health, safety, and equity**
 - Commit City funds to improve bicycling and pedestrian infrastructure citywide and increase access to transit, starting in neighborhoods which are most impacted by climate change, as identified by CalEnviroScreen. The amount of funds should meet or exceed the CAP's mode-share goals, and be adjusted periodically to ensure achievement of goals.
 - Commit City support for a Regional Transportation Plan that puts transit before freeways.
- **Energy Justice: Close the "green divide" and increase solar and efficiency in buildings**
 - Facilitate solar installation in our neighborhoods who are most impacted by climate change.
 - Ensure access to financing and funding, so that existing, inefficient building scan conduct energy audits and efficiency improvements.
 - Upgrade City properties with solar and efficiency in disadvantaged neighborhoods first.
- **Good Jobs**
 - Ensure CAP programs and projects funded or subsidized with public dollars create good-paying jobs for local residents.

- **Climate Adaptation and Resilience**

- Increase trees and parks in neighborhoods who are most impacted by climate change.
- Commit to adopting a climate adaptation plan by 2017 that protects natural resources, wildlife, our coastline, infrastructure, and public health and safety.

The final Climate Action Plan should retain and achieve the current targets

- Reduce greenhouse gas pollution to meet state goals: by 15% by 2020 and 49% by 2035;
- Use 100% clean energy citywide by 2035;
- Use public transit, walking, and biking for 50% of commutes by 2035;
- Reduce waste by 90%;
- Increase urban tree coverage to 35% by 2035.

Additional Considerations for Environmental Review

The environmental review for the Climate Action Plan and Alternate Scenarios should analyze:

- Impacts on air quality and health, particularly in sensitive populations and areas high cumulative pollution burdens, as identified by CalEnviroScreen.
- Compliance with the City General Plan and state laws AB32 and S-3-05
- Enforceability and achievability of the actions proposed
- How recent freeway expansions and gas power plant approvals create a need for stronger CAP actions.

We also urge you to finalize and implement the plan in a transparent and public process, with robust public engagement.

With the analysis and incorporation of the above recommendations, we look forward to supporting the adoption and implementation of the Climate Action Plan, so San Diego can do its part to combat climate change, reduce air pollution, achieve social equity, and improve quality of life, health, economy and environment for *all* San Diegans.

Sincerely,



Arnulfo Manriquez
President & CEO

cc:

Mayor Kevin Faulconer
Council President Sherri Lightner
Councilmember Lorrie Zapf
Councilmember Todd Gloria
Councilmember Myrtle Cole
Councilmember Mark Kersey
Councilmember Chris Cate
Councilmember Scott Sherman
Councilmember David Alvarez
Council President Pro Tem Marti Emerald
Mike Hansen, Director of Land Use & Environmental Policy, Office of Mayor Faulconer
Brian Schoenfisch, Senior Planner, Planning Department

From: [Peter Brownell](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); lorriezapf@sandiego.gov; [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#); [CouncilMember Marti Emerald](#); [Hansen, Mike](#); [Schoenfisch, Brian](#)
Subject: San Diego Climate Action Plan Scoping Comments - Put Our Neighborhoods First
Date: Friday, March 20, 2015 4:53:47 PM

Rebecca Malone, Associate Planner
City of San Diego Planning Department
1222 First Ave, MS 501
San Diego, CA 92101

Dear Ms. Malone,

Climate change threatens all San Diegans' right to live in healthy and resilient communities, and it impacts some neighborhoods more than others. The City should act now to reduce carbon pollution and address the disproportionate risks of climate change in certain neighborhoods.

We urge the City to strengthen, adopt, and implement a comprehensive, equitable, and enforceable Climate Action Plan that protects and invests first in neighborhoods that are most impacted by climate change, and cuts carbon pollution to comply with state climate laws, the City's General Plan, and City Council Resolution R-2015-68.

We strongly support the CAP's commitment to prioritize programs and actions to reduce emissions in disadvantaged communities that rank in the top 25 percent of CalEnviroScreen's ranking for San Diego region communities. We believe that this prioritization assures that CAP will have the strongest impact in addressing the most pressing present effects of climate change.

We urge the CAP and Alternatives to integrate this social equity goal throughout the strategies in Chapter 3, as identified in our comments in prior sections and in our project alternative recommendation.

We also support the CAP's existing job equity commitments (p. 52) to:

- o provide support to disadvantaged communities and promote equitable job growth and economic opportunity,
- o include in CAP programs performance goals and data tracking for quality of jobs created and the demographic and geographic distribution of workers;
- o and ensure all climate work done through City programs comply with the City's prevailing wage ordinance.

The PEIR's economic analysis should examine impacts to local economy from creating clean energy & transit jobs. The analysis should examine not only the number of jobs but also job quality and access of residents of disadvantage neighborhoods to these jobs. We believe our recommendations to prioritize CAP actions in disadvantaged neighborhoods and integrate social equity and job equity throughout CAP actions will show in the economic analysis the potential to create the greatest net benefit.

We believe that it is critical that the CAP address climate adaptation and resilience. Specifically, CAP must increase trees and parks in neighborhoods who are most impacted by climate change. Further the City should adopt a climate adaptation plan by 2017 that protects natural resources, wildlife, our coastline, infrastructure, and public health and safety.

The final Climate Action Plan should retain and achieve the current targets:

- o Reduce greenhouse gas pollution to meet state goals: by 15% by 2020 and 49% by 2035;
- o Use 100% clean energy citywide by 2035;

- o Use public transit, walking, and biking for 50% of commutes by 2035;
- o Reduce waste by 90%;
- o Increase urban tree coverage to 35% by 2035.

The Climate Action Plan's environmental review should analyze and endorse the above recommendations for an Alternate Scenario that protects and prioritizes neighborhoods that are most impacted by climate change. We also urge you to finalize and implement the plan in a transparent and public process, with robust public engagement.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

Peter B. Brownell, Ph.D.

Research Director

Center on Policy Initiatives

3727 Camino del Rio South, Suite 100, San Diego, CA 92108

619.584.5744 x34 | pbrownell@onlinecpi.org

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Cc:

Mayor Kevin Faulconer (kevinfaulconer@saniego.gov)

Council President Sherri Lightner and Councilmembers (sherrilightner@saniego.gov;
lorriezapf@saniego.gov; toddgloria@saniego.gov; myrtlecole@saniego.gov;
markkersey@saniego.gov; chriscate@saniego.gov; scottsherman@saniego.gov;
davidalvarez@saniego.gov; martiemerald@saniego.gov)

Mike Hansen, Director of Land Use & Environmental Policy, Office of Mayor Faulconer
(mhansen@saniego.gov)

Brian Schoenfisch, Senior Planner, Planning Department (bschoenfisch@saniego.gov)

From: [Raymond Paulson](#)
To: [DSD EAS](#)
Subject: Fwd: Comments for plan - could be rewritten better - will this do?
Date: Friday, March 20, 2015 4:58:37 PM

Sending in comments - Please forward as required - Ray Paulson

CITY OF SAN DIEGO CLIMATE ACTION PLAN

1. COMMENT REVIEW –

- A. Utilize ISO 14001 EMS system informally or formally, to ensure that this plan achieves the stated GOALS in the SD CLIMATE ACTION PLAN. The cities of SEATTLE and DALLAS have and while saving tax payer costs they focused on what the tax payers wanted along with improving the urban plan while lowering greenhouse gases. The ISO 14001 EMS formal register or informal work otherwise in most cases organizations including municipalities do not achieve the goals and with them they exceeds and people are happy with the results.
- B. Include City Policy with VISION, MISSION, OBJECTIVES, GOALS and METRICS using S-TBL-LCA to filter solutions and guide effective policy – for all to read daily and understand.
- C. Utilize LEAN, SIX SIGMA and TOC as improvement METHODS proven to work to identify VALID SOLUTIONS for the ISO 14001 EMS. For example new MONEY TOOL for municipalities is to deconstruct old buildings via NON PROFITS that do this for recycling the materials and receive the tax write off for donating recycled materials while creating key OPEN SPACE - and the higher density as the only solution is ruining san diego as the money took - real solutions are needed in URBAN PLAN for optimizing the whole and the parts of the city and county (Composite and parts view to find solutions).
- D. Utilize Sustainability Triple Bottom Line Life Cycle Analysis (S-TBL-LCA) relevant CATEGORIES and CRITERIA to FILTER the VALID solutions for then subjectively making the best decisions with the necessary supporting information – single project and composite in S-TBL-LCA URBAN PLAN (City and County) to ensure success – with the S-TBL-LCA URBAN PLAN component most plans DO NOT WORK because the COMPOSITE VIEW THAT IMPORTANT to achieve results.
- E. Include the tax payer via COMMUNITY CHOICE and other measures so that the best solutions are implemented.
- F. For NEPA and CEQA EIS studies, utilize the per CAPITA amount San Diego owes to achieve global carbon dioxide concentration below 350 parts per million as moderate clean air act attainment (as goal) AND OR use the existing CAP goals extrapolated by 2035 from 2050 overall goal.
- G. Annually update plans with solution made transparent to the public with the S-TBL-LCA information so they can make comments and suggestions that can be evaluated to find the best answers.
- H. The Triple Bottom Line Sustainability has allegory to really get why this thinking system works as follows:
 - a. Environment = Conditions and Appearance and True Value for Sustainability (e.g. ugly or over crowded brings reaction not self-moved intelligence behavior negatively impacting the economics and quality of life - crowd like Los Angeles is ugly - if the city scape is not intuitively right it robs quality of life and then economy and environment.

- b. Economics = Activities (smart and proactive or reactive meaning negative costs), energy levels of the people and income levels and Core Values
- c. Social = Social Behavior based on Education Levels or Thinking System (e.g. duality or act react bring regressive costs or negative economics or triple bottom line thinking bringing more abundance), Meaningful Experiences and Enlightened Ideals or Poor Ideals.

I. The plan should clearly state annual goals to meet the CAP for California by 2035 and 2050 with metrics showing progress. Plans should also require feasible projects with cost benefit transparent to public with COMMUNITY CHOICE for the best outcome by addressing all co2 sources that exceed 5% of the total each year.

The mutual interdependence of attracting top professors, artists, scientists, and other talent to raise their kids in San Diego predicts the value that can be generated by the economy requiring the right environment and also social life. Way too many workers are now commuting in from Temecula to work and spend in that area while mission valley mall degrades the shops to lower income and police and tattoo parlors and related activities – so that people with higher paying jobs will not attend – this is how Detroit and Los Angeles imploded inside while the higher wage workers commute 2 or more hours each way producing less value because they are more tired at their jobs. This is a reaction based URBAN plan unfolding in San Diego – and this greatly increases the CARBON FOOTPRINT. Understanding S-TBL-LCA and ISO 14001 EMS and LEAN/SIX SIGMA/TOC is paramount to be an effective manager or city official or staff member – engineers included and so forth. The US Navy and Industry has had to learn these tools to survive the global economy and not implode. Without change here the carbon footprint will continue to go up!

The city of San Diego used to be ranked finest city #1 – now <#25. Why – no solid plan by city officials and concerned citizens with the RIGHT EDUCATION to manage and share solutions. Los Angeles is a poor model and many cities like Detroit fell into the higher density money tool to falsely revitalize 20 years from more poverty according to URBAN PLANNERS. This has to change because The USA CITIES is the USA economy!!! And china and India and Germany are on the rise – we have to reeducate and get with the times.

- I. With the above tools we begin to see how to make annual improvement plans transparent to the tax payer to make San Diego #1 finest city AGAIN – we have the weather – we are missing the EDUCATION on how to manage a city properly! To effectively reduce carbon emissions to CAP levels and beyond. The annual education and additional for responsible for this plan should include education for ISO 14001, LEAN-SIX SIGMA and TOC and Sustainability Triple Bottom Line Life Cycle Analysis to select the best optimal solutions.

All modern day PLANS typically contain the following PLAINLY STATED elements as a POLICY –

- 2. Vision – missing - COMMENT without a shared VISION STATED for all city employees and council members to post on their areas to see it and know where it is posted and understand it poor results are predicted based on studies – ISO 14001 and other standards that get

results require this in a policy posted for all employees are to know where it is and understand the importance of it!

3. Mission – missing – Same comment as above -

4. Objectives – based on the report they are – COMMENTS PROVIDED

A. Energy and Water Efficient Buildings

B. Clean and Renewable Energy – COMMENTS – TRAIN city employees annually on the latest for lowest cost renewable energy sources (note finding the right training programs the key) – you cannot project manage effectively what you are not educated on for the best value for tax payer – proven by studies – the training element is missing for city officials and staff members and workers.

COMMENT ON WHAT IS AVAILABLE WITH PERFORMANCE MEASURES MET FOR

IMPLEMENTATION – environment/economics/social performance SUSTAINABILITY TRIPLE BOTTOM LINE LIFE CYCLE ANALYSIS (S-TBL-LCA) studies found the following renewables the next feasible PRACTICAL STEP for benefits to society!!!

- i. STUDY NEEDED - US navy is going to 50% algae oil based fuel for all planes, ships and vehicles began in 2012 and complete by 2020 – why? Sinking islands and polar caps from global warming cannot defend democracy because too costly – need more islands and ships for the new sea lanes in the poles beyond budget even when the G-7 economy was booming. Algae out performs corn, ten thousand plus gallons per acre vice corn 200 gallons per acre (net negative for carbon takes more fuel to harvest corn than fuel harvested) – Algae is grown where corn and food does not for enhanced economy – and corn best use and other food is best used as food – based on S-TBL-LCA studies by the US navy. Projected cost wholesale of Algae based gas is \$1 per gallon when scaled up. 800 20x40 mile farms on desolate land not used today in the USA replaces all fuel needs for the USA providing new needed jobs – this would replace fracking etc. that are negative economics longer term because of environmental damage etc. The existing fuel systems can be used with algae oil based gas. See <http://www.nasa.gov/centers/ames/research/OMEGA/> and <http://www.sapphireenergy.com/locations/green-crude-farm>.
- ii. STUDY NEEDED - <http://magnegas.com/> - Sewage treatment plants are overfilling in most major USA cities and help is needed – Magnetically formed Hydrogen Gas from SEWAGE provides fertilizer, clean water and Hydrogen Gas that can be MIXED with NATURAL GAS for everyday SAFE use – this magnetic formed Hydrogen Gas is SAFER like natural gas – will not flammable unless exposed to oxygen – Imagine that SEWAGE now brings in MONEY to municipalities rather than Cost!!! Much more efficient way of making energy from sewage and LOWER sewage treatment costs than what is being done at the San Diego POTW. Note – also Powell water electronic coagulation cost is 25 cents per 1000 gallon lowest cost electron to treat sewage water or drinking water to lower costs even more.
- iii. STUDY NEEDED - Nuclear plants on the ocean shut down because of Fukushima (too risky and if all costs added and mining of uranium using fossil fuel based machines cost too much and do have carbon emissions) plant north of ocean side can be replaced with LARGE UNDER WATER OCEAN TURBINES SAFE FOR AQUATIC LIFE with electric lines to shore.
- iv. STUDY NEEDED - Wind energy cost is the LOWEST cost for renewables. And CAL TECH in Pasadena has designed and is testing new vertical turbines with opposed spin to achieve 10X wind power in the same land space! Also being tested new wind turbines horizontal 2-3x more power can space much closer! Importing wind energy should be the lowest cost for

renewables.

- v. STUDY NEEDED - Solar bought in bulk purchase agreements for roof tops owned by the utility for government buildings and homes to achieve LOW cost are being done in some areas.
- C. Biking, a Walking and Transit – COMMENT - In Europe bike lane is made SAFE ENOUGH people bike a lot. The SAFETY factor has to be considered with link up through the areas to increase usage. Also for the trolley – a solar panel strip can be added to the trolley line the full length minimal width so the real estate is already available – and the electricity can be sent right where it is needed with smart controls to move the trolleys! Or feed the grid and use the grid energy (more practical).
- D. Zero Waste – COMMENTS see <http://www.asaie.army.mil/Public/ES/netzero/> Note – the army defines net zero waste and prioritizes categories for action and provides annual plans with metrics for achieving the net zero waste goal – all waste is VALUE for economics if we act SMARTER by SYSTEM DESIGN and also improves quality of life – no reason not to – etc. Zero waste for sewage – most cities have old ceramic pipes and they are leaking – since they need to be replaced check out the city of IRVINE blue/green/gray water lines – all gray water can be treated for agriculture and city scape watering to then fill up aquifers to then be treated for human use – sewage to human use should be modified to sewage to agriculture and city scape watering to aquifer to treatment for human use.
- E. Climate Resiliency – COMMENT is to modify Climate Resiliency category to “Climate Resiliency and Sustainable Urban Planning.”
 - a. COMMENTS - urban planners state the new high rise apartments popping up on freeways not only clog traffic generating idling cars and CO2 but also become hornets nests in their terminology requiring more police and reaction based non sustainable spending. All cities are clogging up – is non-sustainable – they use whether it is Phoenix, Albuquerque, Dallas, Houston, Seattle etc., the results are the same. Cities are using HIGHER DENSITY to REDEVELOP CITIES becoming more and more like LOS ANGELES! LOS ANGELES is today poverty ridden. What is then the solution?

What was discovered in the early 2000's is the following – non-profit companies are now dismantling junk buildings for no charge because they retain revenue for the value of the materials in the recycling market. The donation tax credit for donating the junk building provides REAL INCOME to justify reducing density and a money method or tool to follow an URBAN PLAN FOR TRIPLE BOTTOM LINE SUSTAINABILITY USING LIFE CYCLE ANALYSIS – People in san Diego, the workers, have escaped to Temecula to be out of the overcrowding – and they spend their money in malls out of san Diego – and the san Diego malls are catering to lesser incomes – and eateries – like mission valley mall – becoming los Angeles like –if this continues san Diego will continue to decline as #1 city using real criteria to less than the #25 rating today – this decline is like Los Angeles using HIGHER DENSITY MONEY TOOL to justify redevelopment – until all professionals commute the inside urban core implodes – like in DETROIT this happened too...and employers found employees commuting 2 hours each way like Temecula – and less work performance – until people just leave the region – more implosion – this is happening needs to be stopped – stopping this will also lower Co2 emissions.

- b. Building each village in San Diego complete to reduce day trips in cars period!!! The

people in Scripps ranch and the barbs have to drive far to get to their day – why? Poor urban planning!!!

- c. If there is a single word that describes the San Diego region, it is “paradise.” And this paradise is our home. It is declining – using real criteria – the co2 footprint is inroads to getting urban planning done right to rebuild san Diego to #1 finest city in the USA.
- F. The City of San Diego Climate Action Plan does include the S-TBL categories but it does not contain the PROACTIVE measures typically utilized to GET RESULTS.

For example, EPA via the CLEAN AIR ACT and other measures imposed limitations on what can come out of any combustion, ablation and evaporative air emission source to clean up the air. While this worked, what moved industry and people to make a bigger positive change was to develop pollution prevention or environmental improvement plans to improve the environment and include the cost savings and quality of life increase only to then naturally and organically motivate positive change – THIS WORKS! And will work for Co2 (e) emission reduction – HOW? ISO 14001 model informal or formally used -

Two examples come from of Seattle and Dallas who implemented the tenants of ISO 14001 standards a MANAGEMENT TOOL with METHOD to ensure that TAX DOLLARS are used to benefit the customer or tax payers in meaningful ways for a SUSTAINABLE TRIPLE BOTTOM LINE CITY – environment path analysis annually finds otherwise not found economic and social life performance improvements.

The ISO 14001 requires the entity, say the City of San Diego, to flow chart the SIGNIFICANT SOURCES of GREEN HOUSE GASES (and other forms of waste) because waste reveals a pattern of behavior from core values from a thinking system that is not working. To the rescue is the Sustainability Triple Bottom Line thinking system (environmental path deficits or waste reveals a pattern requiring root cause analysis and innovation to find economic and social performance increases) with relevant criteria to evaluate solutions. The methods to find solutions used today by the US navy and leading municipalities and corporations is LEAN, SIX SIGMA and THEORY OF CONSTRAINTS that may be used to analysis the flow chart of significant sources of waste including greenhouse gases.

Then, Relevant Sustainability Triple Bottom Line Life Cycle Assessment CRITERIA understood by the tax payer and city officials is used to FILTER OUT PROJECTS to then make a subjective decision on what will work or not work – community choice is natural fit to this process!

The city of Dallas and Seattle also mailed out full page newspaper ads to then find the top ten priorities to spend tax payer dollars correctly, including lower greenhouse gases as part of the proactive urban changes for reconstructing the city to be optimized or a SMART city meaning a SUSTAINABLE CITY. The result has been savings millions of dollars, stimulating the economy, improving the quality of life and also achieving net zero carbon emission goals.

Because of the power of that tool a comment – The CITY OF SAN DIEGO CLIMATE ACTION PLAN should include a plan updated annually with complete update every 5 years showing ways to reduce carbon and equivalent (CO2 (e)) emissions from any source that exceeds 5% of the total using feasible technology that is cost effective and expose the solutions to the public showing cost savings

and improvement to land use urban planning for quality of life.

G. The beauty factor – if a redevelopment is too crowded or ugly it is typically our intuition letting us know that the change is not sustainable – and leads to freeways that are clogged – increasing the co2 footprint from idling cars! Wider freeways and buildings right on the freeway is not sexy but is UGLY!!! UGLY is not sustainable.

H. What is sustainable is –

Environment – APPEARANCE and CONDITIONS – BEAUTY OR UGLY??????

Economics – CORE VALUES AS ACTIVITIES PROACTIVE attracting professional talent to raise their kids in our area or REACTIVE SPENDING LIKE EXCESSIVE POLICE NEEDED BECAUSE OF URBAN PLANNERS PREDICTION THAT HIGH RISE APARTMENTS LEAD TO EXCESSIVE POLICE NEEDS ETC... and also excessive carbon emissions due to clogged freeways and idling cars....drive to Los Angeles and see the poverty....STOP LA NOW used to be a slogan in San Diego – yet city planners state that their kids require a low cost home regardless of density and carbon emissions as an emotional response and not rational thinking – the city build out has limits – why crowd it up more and then impose limits generating a reaction based core value system – read your urban planning books and take seminars – education needed here!!!

Social - THINKING SYSTEM and core values – any deficit need MASLOW identified waste or poverty that requires remedy – carbon emissions is one sign and clue – get the S-TBL-LCA city and county urban plan right and net zero carbon can be achieved –

- I. Achieve net zero carbon via S-TBL-LCA Urban plan in SYSTEMS THINKING using 5% or more of the total carbon sources as inroads to deficit finding to re-construct areas – using money tool for recycling building materials and tax write off as the income to justify lowering density in KEY SAN DIEGO AREA to get the freeways moving while lowering carbon emissions.
- J. Road map to achieve net zero carbon – or CAP goals – flow chart all carbon source greater than 5% - and then USE LEAN, SIX SIGMA and THEORY OF CONSTRAINTS and S-TBL-LCA URBAN PLAN to evaluate technologies that will work – then filter with S-TBL-LCA relevant categories to filter the solution using an EMS ISO 14001 model for annual continual improvement – if that is not understandable AN EDUCATION is needed by city officials and staff to GET WITH THE TIMES – THE US NAVY and INDUSTRY has had to learn these tools to be cost wise effective for modern times with the new international markets opening!!!
- K. NEPA and CEQA require an EIS – for carbon should be equated to per capital California and SCAL share for USA share from international view to reduce effectively – and demonstrate that this is happening – note - California can adopt forests and oceans to revitalize to offset Co2 like Hyundai motor company has and others....and a relief measure to find solutions....
5. GOALS – COMMENT how are goals are set each year to achieve objectives for CAP and beyond CAP goals – Utilize LEAN, SIX SIGMA, TOC as modern METHODS to identify GOALS from real progress that can be made – filtered with S-TBL-LCA
6. METRICS – COMMENT – what relevant metrics will be kept as feedback for achieving goals???

From: [Avital Aboody](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); lorriezapf@sanidiego.gov; [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Thursday, March 19, 2015 5:37:11 PM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

The Climate Action Plan should be strengthened to achieve:

- **Transportation justice:** Invest in transit, bicycling, and pedestrian infrastructure in our neighborhoods first, and put people and transit before freeways
- **Energy justice:** Put solar in our neighborhoods, give San Diegans a clean energy choice, and require buildings to be energy efficient
- **Jobs:** Create good-paying jobs for local residents
- **Climate change resilience:** Protect our natural resources, wildlife, coastline, infrastructure, and public health from the harmful impacts of climate change
- **Achieve bold goals and comply with local and state laws:** Meet or exceed the draft climate plan's goals to cut carbon in half, use alternative transit for half of commutes, use 100 percent clean energy, increase our urban forests and parks and reduce waste.

The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

Avital Aboody

Aboodyavital@gmail.com
1345 Gregory St.

San Diego, CA, 92102

From: [Mia Bolton](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); lorriezapf@sandiego.gov; [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Thursday, March 19, 2015 10:45:30 AM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

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Please consider implementing this plan first in low-income communities south of I-8. This part of San Diego is hit hardest by the effects of climate change making the air difficult to breathe, causing chronic respiratory problems amongst residents, particularly children, and much more. San Diego has the opportunity to do something and make real change. We can come out swinging with a Climate Action Plan that makes an impact right away if we work in communities that need help most fresh out of the gate.

The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

Mia Bolton

mia@gomixte.com
5116 Narragansett Ave. #12

San Diego, California, 92107

From: [Nancy Dalton](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); lorriezapf@sanidiego.gov; [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Thursday, March 19, 2015 11:56:59 AM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

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The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

Nancy Dalton

ndalton@ucsd.edu
4494 Sunset Bluffs Way

San Diego, California, 92130

From: [Kyle Heiskala](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); lorriezapf@sandiego.gov; [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Thursday, March 19, 2015 5:34:32 PM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

The Climate Action Plan should be strengthened to achieve:

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The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

Kyle Heiskala
Bicycle Advisory Committee Member
heikyle.kh@gmail.com
1504 Robinson Ave. #1

San Diego, CA, 92103

From: [Lucas Salazar](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); lorriezapf@sanidiego.gov; [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Thursday, March 19, 2015 10:42:26 AM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

The Climate Action Plan should be strengthened to achieve:

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I support this.

The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

Lucas Salazar

lsalazar987@gmail.com
3520 Lebon Drive #5313

San Diego, CA, 92122

From: [Nadine Scott](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); lorriezapf@sandiego.gov; [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Thursday, March 19, 2015 11:26:15 AM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

The Climate Action Plan should be strengthened to achieve:

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These are common sense solutions that will positively impact the entire county.

The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

Nadine Scott

nadia550@sbcglobal.net
550 HOOVER ST

OCEANSIDE, California, 92054

From: [Zulema Díaz](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); lorriezapf@sanidiego.gov; [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Friday, March 20, 2015 12:27:16 AM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

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The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

Zulema Díaz
Adjunct Professor
zulediaz9@gmail.com
4141 Sycamore Dr.

San Diego, CA, 92105

From: [Alicia Roblez Lopez](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); lorriezapf@sandiego.gov; [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Friday, March 20, 2015 8:36:04 PM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

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Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

Alicia Roblez Lopez

diss.ccourse@gmail.com
423 E 24th St. Apt 102

National City, CA, 91950

From: [Keith Mesecher](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); lorriezapf@sanidiego.gov; [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Friday, March 20, 2015 9:10:01 AM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

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The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

Keith Mesecher

mesecher@cox.net
6448 Scimitar Drive

San Diego, CA, 92114

From: [Madelyn Sullivan](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); lorriezapf@sanidiego.gov; [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Friday, March 20, 2015 10:35:25 AM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

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The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

Madelyn Sullivan

madelyn.sullivan@gmail.com
P O Box 232505

Encinitas, CA, 92023

From: [David Gangsei](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); lorriezapf@sanidiego.gov; [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Saturday, March 21, 2015 10:18:45 AM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

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The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

David Gangsei

dgangsei@hotmail.com
5465 Madison Ave.

San Diego, CA, 92115

From: [Craig Rose](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); lorriezapf@sanidiego.gov; [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Saturday, March 21, 2015 4:13:20 PM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

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- **Achieve bold goals and comply with local and state laws:** Meet or exceed the draft climate plan's goals to cut carbon in half, use alternative transit for half of commutes, use 100 percent clean energy, increase our urban forests and parks and reduce waste.

The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

Craig Rose

craigdrose@sbcglobal.net
10644 Escobar Drive

San Diego, Ca., 92124

From: [Jan Sachs](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); lorriezapf@sandiego.gov; [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Saturday, March 21, 2015 12:54:51 PM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

The Climate Action Plan should be strengthened to achieve:

- **Transportation justice:** Invest in transit, bicycling, and pedestrian infrastructure in our neighborhoods first, and put people and transit before freeways
- **Energy justice:** Put solar in our neighborhoods, give San Diegans a clean energy choice, and require buildings to be energy efficient
- **Jobs:** Create good-paying jobs for local residents
- **Climate change resilience:** Protect our natural resources, wildlife, coastline, infrastructure, and public health from the harmful impacts of climate change
- **Achieve bold goals and comply with local and state laws:** Meet or exceed the draft climate plan's goals to cut carbon in half, use alternative transit for half of commutes, use 100 percent clean energy, increase our urban forests and parks and reduce waste.

Incentivize property owners to retro-fit buildings with energy efficient upgrades.

The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

Jan Sachs
Board of Directors
jan.sachs@comcast.net
5765 Friars Rd. #162

San Diego, CA, 92110

From: [Pam Clark](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); lorriezapf@sanidiego.gov; [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Sunday, March 22, 2015 11:37:03 AM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

The Climate Action Plan should be strengthened to achieve:

- **Transportation justice:** Invest in transit, bicycling, and pedestrian infrastructure in our neighborhoods first, and put people and transit before freeways
- **Energy justice:** Put solar in our neighborhoods, give San Diegans a clean energy choice, and require buildings to be energy efficient
- **Jobs:** Create good-paying jobs for local residents
- **Climate change resilience:** Protect our natural resources, wildlife, coastline, infrastructure, and public health from the harmful impacts of climate change
- **Achieve bold goals and comply with local and state laws:** Meet or exceed the draft climate plan's goals to cut carbon in half, use alternative transit for half of commutes, use 100 percent clean energy, increase our urban forests and parks and reduce waste.

The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

Pam Clark

pamczown@gmail.com
3121 Hawthorn St.

San Diego, CA, 92104

From: [Roberta Alexander](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); lorriezapf@sanidiego.gov; [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Monday, March 23, 2015 1:50:40 PM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

The Climate Action Plan should be strengthened to achieve:

- **Transportation justice:** Invest in transit, bicycling, and pedestrian infrastructure in our neighborhoods first, and put people and transit before freeways
- **Energy justice:** Put solar in our neighborhoods, give San Diegans a clean energy choice, and require buildings to be energy efficient
- **Jobs:** Create good-paying jobs for local residents
- **Climate change resilience:** Protect our natural resources, wildlife, coastline, infrastructure, and public health from the harmful impacts of climate change
- **Achieve bold goals and comply with local and state laws:** Meet or exceed the draft climate plan's goals to cut carbon in half, use alternative transit for half of commutes, use 100 percent clean energy, increase our urban forests and parks and reduce waste.

The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

Roberta Alexander
Dr.
alexanderroberta77@gmail.com
4528 Vista St.

San Diego, California, 92116

From: [Lilia](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); lorriezapf@sanidiego.gov; [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Monday, March 23, 2015 9:34:33 AM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

The Climate Action Plan should be strengthened to achieve:

- **Transportation justice:** Invest in transit, bicycling, and pedestrian infrastructure in our neighborhoods first, and put people and transit before freeways
- **Energy justice:** Put solar in our neighborhoods, give San Diegans a clean energy choice, and require buildings to be energy efficient
- **Jobs:** Create good-paying jobs for local residents
- **Climate change resilience:** Protect our natural resources, wildlife, coastline, infrastructure, and public health from the harmful impacts of climate change
- **Achieve bold goals and comply with local and state laws:** Meet or exceed the draft climate plan's goals to cut carbon in half, use alternative transit for half of commutes, use 100 percent clean energy, increase our urban forests and parks and reduce waste.

The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

Lilia
Director of Finance
liliae@environmentalhealth.org
1364 South 38th Street

San Diego, CA, 92113

From: [Giuliana](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); lorriezapf@sanidiego.gov; [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Tuesday, March 24, 2015 9:06:15 AM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

The Climate Action Plan should be strengthened to achieve:

- **Transportation justice:** Invest in transit, bicycling, and pedestrian infrastructure in our neighborhoods first, and put people and transit before freeways
- **Energy justice:** Put solar in our neighborhoods, give San Diegans a clean energy choice, and require buildings to be energy efficient
- **Jobs:** Create good-paying jobs for local residents
- **Climate change resilience:** Protect our natural resources, wildlife, coastline, infrastructure, and public health from the harmful impacts of climate change
- **Achieve bold goals and comply with local and state laws:** Meet or exceed the draft climate plan's goals to cut carbon in half, use alternative transit for half of commutes, use 100 percent clean energy, increase our urban forests and parks and reduce waste.

The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

Giuliana

giulianas@environmentalhealth.org
1823 Casa Morro St #21

Chula Vista, CA, 91915

From: [Georgette Gomez](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); lorriezapf@sanidiego.gov; [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Tuesday, March 24, 2015 10:30:46 AM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

The Climate Action Plan should be strengthened to achieve:

- **Transportation justice:** Invest in transit, bicycling, and pedestrian infrastructure in our neighborhoods first, and put people and transit before freeways
- **Energy justice:** Put solar in our neighborhoods, give San Diegans a clean energy choice, and require buildings to be energy efficient
- **Jobs:** Create good-paying jobs for local residents
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- **Achieve bold goals and comply with local and state laws:** Meet or exceed the draft climate plan's goals to cut carbon in half, use alternative transit for half of commutes, use 100 percent clean energy, increase our urban forests and parks and reduce waste.

The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

Georgette Gomez

g.gomez.guzman@gmail.com
4125 Pepper Dr

San Diego, CA, 92105

From: [Huerta, Claudia](#)
To: [DSD EAS](#)
Subject: Re: San Diego Climate Action Plan Scoping Comments - Put Our Neighborhoods First
Date: Monday, March 30, 2015 2:27:26 PM

Dear Ms. Malone,

Climate change threatens all San Diegans' right to live in healthy and resilient communities, and it impacts some neighborhoods more than others. The City should act now to reduce carbon pollution and address the disproportionate risks of climate change in certain neighborhoods.

We urge the City to strengthen, adopt, and implement a comprehensive, equitable, and enforceable Climate Action Plan that protects and invests first in neighborhoods that are most impacted by climate change, and cuts carbon pollution to comply with state climate laws, the City's General Plan, and City Council Resolution R-2015-68.

The Climate Action Plan should be strengthened to achieve:

Transportation Justice: Improve access, affordability, public health, safety, and equity

- o Improve bicycling and pedestrian infrastructure throughout the city and increases access to transit, starting in neighborhoods that are most impacted by climate change.
- o Commit City support for a Regional Transportation Plan that puts transit *before* freeways.

Energy Justice: Close the 'green divide,' increase solar and efficiency in buildings

- o Facilitate solar installation in our neighborhoods who are most impacted by climate change.
- o Require new buildings to have clean energy such as solar to meet their electricity needs.
- o Require upgrades to existing, inefficient buildings and ensure financing and funding access.
- o Upgrade City properties with solar and efficiency in disadvantaged neighborhoods first.

Good Jobs:

- o Commit to a plan that creates good-paying jobs for local residents.

Climate Adaptation and Resilience

- o Increase trees and parks in neighborhoods who are most impacted by climate change.
- o Commit to adopting a climate adaptation plan by 2017 that protects natural resources, wildlife, our coastline, infrastructure, and public health and safety.

The final Climate Action Plan should retain and achieve the current targets:

- o Reduce greenhouse gas pollution to meet state goals: by 15% by 2020 and 49% by 2035;
- o Use 100% clean energy citywide by 2035;
- o Use public transit, walking, and biking for 50% of commutes by 2035;
- o Reduce waste by 90%;
- o Increase urban tree coverage to 35% by 2035.

The Climate Action Plan's environmental review should analyze and endorse the above recommendations for an Alternate Scenario that protects and prioritizes neighborhoods that are most impacted by climate change. We also urge you to finalize and implement the plan in a transparent and public process, with robust public engagement.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

Claudia Huerta

Claudia Huerta – MSUP, Public Affairs and Latino Engagement Manager

Planned Parenthood Action Fund of the Pacific Southwest

1075 Camino del Rio South | San Diego, CA 92108

Email: chuerta@planned.org | Office: 619.881.5083 | Fax: 619.542.0486

Visit: voteforchoice.org | Give: ppactionca.org/donateppafpsw | Volunteer: ppactionca.org/takeactionppafpsw



This electronic transmission contains information from Planned Parenthood of the Pacific Southwest, which may be confidential or protected by the attorney-client privilege, the work product doctrine, or both. If you are not the intended recipient, please do not copy, disclose, distribute, rely upon or otherwise use the content of this message. If you have erroneously received this message, please immediately advise the sender by reply email and then delete this message and any attachments.

From: [Jose Franco](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); [CouncilMember Lorie Zapf](#); [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Monday, April 06, 2015 11:57:54 AM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

The Climate Action Plan should be strengthened to achieve:

- **Transportation justice:** Invest in transit, bicycling, and pedestrian infrastructure in our neighborhoods first, and put people and transit before freeways
- **Energy justice:** Put solar in our neighborhoods, give San Diegans a clean energy choice, and require buildings to be energy efficient
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- **Achieve bold goals and comply with local and state laws:** Meet or exceed the draft climate plan's goals to cut carbon in half, use alternative transit for half of commutes, use 100 percent clean energy, increase our urban forests and parks and reduce waste.

The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

Jose Franco

JGFranco81@gmail.com
1305 Piedra Street

San Diego, California, 92154

From: [Herrmann, Myra](#)
To: [Malone, Rebecca](#); [Litchney, Seth](#); [Steinert, Kurtis](#)
Subject: FW: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Thursday, April 09, 2015 4:23:06 PM

This email was in the DSDEAS mailbox today so thought I better forward. It's more plan-specific, but concludes with a statement that the environmental review should analyze and endorse the plan recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Enjoy!

Myra

MYRA HERRMANN, SENIOR PLANNER/ARCHAEOLOGY/TRIBAL LIAISON
City of San Diego - Planning Department-Environmental
1222 1st Avenue, MS 501
San Diego, CA 92101
(619) 446-5372
(619) 794-5562 (cell)
mherrmann@sandiego.gov
www.sandiego.gov

From: David Gangsei [<mailto:dgangsei@hotmail.com>]
Sent: Thursday, April 09, 2015 2:12 PM
To: DSD EAS
Cc: Mayor Kevin Faulconer; Councilmember Sherri Lightner; CouncilMember Lorie Zapf; Councilmember Todd Gloria; Councilmember Myrtle Cole; Councilmember Mark Kersey; CouncilMember Chris Cate; Councilmember Scott Sherman; CouncilMember David Alvarez
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

The Climate Action Plan should be strengthened to achieve:

- **Transportation justice:** Invest in transit, bicycling, and pedestrian infrastructure in our neighborhoods first, and put people and transit before freeways
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- **Climate change resilience:** Protect our natural resources, wildlife, coastline, infrastructure, and public health from the harmful impacts of climate change
- **Achieve bold goals and comply with local and state laws:** Meet or exceed the draft climate plan's goals to cut carbon in half, use alternative transit for half of commutes, use 100 percent clean energy, increase our urban forests and parks and reduce waste.

The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

David Gangsei

dgangsei@hotmail.com
5465 Madison Ave.

San Diego, California, 92115

From: [Herrmann, Myra](#)
To: [Malone, Rebecca](#)
Subject: FW: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Thursday, April 09, 2015 4:23:46 PM

From: David Gangsei [<mailto:dgangsei@hotmail.com>]

Sent: Thursday, April 09, 2015 2:12 PM

To: DSD EAS

Cc: Mayor Kevin Faulconer; Councilmember Sherri Lightner; CouncilMember Lorie Zapf; Councilmember Todd Gloria; Councilmember Myrtle Cole; Councilmember Mark Kersey; CouncilMember Chris Cate; Councilmember Scott Sherman; CouncilMember David Alvarez

Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

The Climate Action Plan should be strengthened to achieve:

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The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

David Gangsei

dgangsei@hotmail.com
5465 Madison Ave.

San Diego, California, 92115

From: [David Gangsei](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); [CouncilMember Lorie Zapf](#); [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Thursday, April 09, 2015 2:11:58 PM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

The Climate Action Plan should be strengthened to achieve:

- **Transportation justice:** Invest in transit, bicycling, and pedestrian infrastructure in our neighborhoods first, and put people and transit before freeways
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- **Achieve bold goals and comply with local and state laws:** Meet or exceed the draft climate plan's goals to cut carbon in half, use alternative transit for half of commutes, use 100 percent clean energy, increase our urban forests and parks and reduce waste.

The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

David Gangsei

dgangsei@hotmail.com
5465 Madison Ave.

San Diego, California, 92115

From: [Kimberly Salazar](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); [CouncilMember Lorie Zapf](#); [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Saturday, April 11, 2015 10:47:29 AM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

The Climate Action Plan should be strengthened to achieve:

- **Transportation justice:** Invest in transit, bicycling, and pedestrian infrastructure in our neighborhoods first, and put people and transit before freeways
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The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

Kimberly Salazar
UC San Diego Student
kimberlysalazar94@gmail.com
7852 Avenida Navidad 203

San Diego, California, 92122

From: [David Gangsei](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); [CouncilMember Lorie Zapf](#); [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Monday, April 13, 2015 11:14:58 AM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

The Climate Action Plan should be strengthened to achieve:

- **Transportation justice:** Invest in transit, bicycling, and pedestrian infrastructure in our neighborhoods first, and put people and transit before freeways
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The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

David Gangsei
psychologist
dgangsei@hotmail.com
5465 Madison Ave.

San Diego, California, 92115

From: [Andy Kopp](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); [CouncilMember Lorie Zapf](#); [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Thursday, April 16, 2015 1:00:20 PM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

The Climate Action Plan should be strengthened to achieve:

- **Transportation justice:** Invest in transit, bicycling, and pedestrian infrastructure in our neighborhoods first, and put people and transit before freeways
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The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

Andy Kopp

andykoppsd@gmail.com
350 11th Ave, #341

San Diego, CA, 92101

From: [Carolina Prado](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); [CouncilMember Lorie Zapf](#); [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Tuesday, April 21, 2015 3:52:42 PM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

The Climate Action Plan should be strengthened to achieve:

- **Transportation justice:** Invest in transit, bicycling, and pedestrian infrastructure in our neighborhoods first, and put people and transit before freeways
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The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

Carolina Prado

carolinapradotorres@gmail.com
4827 Wightman St

San Diego, CA , 92105

From: [Kathy Dervin](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); [CouncilMember Lorie Zapf](#); [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Tuesday, April 28, 2015 2:45:28 PM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

The Climate Action Plan should be strengthened to achieve:

- **Transportation justice:** Invest in transit, bicycling, and pedestrian infrastructure in our neighborhoods first, and put people and transit before freeways
- **Energy justice:** Put solar in our neighborhoods, give San Diegans a clean energy choice, and require buildings to be energy efficient
- **Jobs:** Create good-paying jobs for local residents
- **Climate change resilience:** Protect our natural resources, wildlife, coastline, infrastructure, and public health from the harmful impacts of climate change
- **Achieve bold goals and comply with local and state laws:** Meet or exceed the draft climate plan's goals to cut carbon in half, use alternative transit for half of commutes, use 100 percent clean energy, increase our urban forests and parks and reduce waste.

By Adopting a strong and equity oriented CAP, San Diego can provide a strong message to your residents and be an example to other cities Thanks for being a climate leader!

The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

Kathy Dervin
Climate and Health specialist
dervin.kathy@gmail.com
1909 San Antonio

Berkeley, CA, 94707

From: [Paula Mack](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); [CouncilMember Lorie Zapf](#); [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Tuesday, April 28, 2015 12:38:03 PM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

The Climate Action Plan should be strengthened to achieve:

- **Transportation justice:** Invest in transit, bicycling, and pedestrian infrastructure in our neighborhoods first, and put people and transit before freeways
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- **Achieve bold goals and comply with local and state laws:** Meet or exceed the draft climate plan's goals to cut carbon in half, use alternative transit for half of commutes, use 100 percent clean energy, increase our urban forests and parks and reduce waste.

The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

Paula Mack

mattsonc@cruzio.com
1111 Hope Way

Santa Cruz, CA, 95062

From: [Brian Polejes](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); [CouncilMember Lorie Zapf](#); [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Tuesday, April 28, 2015 1:49:30 PM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

The Climate Action Plan should be strengthened to achieve:

- **Transportation justice:** Invest in transit, bicycling, and pedestrian infrastructure in our neighborhoods first, and put people and transit before freeways
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- **Jobs:** Create good-paying jobs for local residents
- **Climate change resilience:** Protect our natural resources, wildlife, coastline, infrastructure, and public health from the harmful impacts of climate change
- **Achieve bold goals and comply with local and state laws:** Meet or exceed the draft climate plan's goals to cut carbon in half, use alternative transit for half of commutes, use 100 percent clean energy, increase our urban forests and parks and reduce waste.

The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

Brian Polejes

bpolejes@gmail.com
3957 30th St. Unit 314

San Diego, CA, 92104

From: [Nancy Toba-Laba](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); [CouncilMember Lorie Zapf](#); [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Thursday, April 30, 2015 2:42:15 PM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

The Climate Action Plan should be strengthened to achieve:

- **Transportation justice:** Invest in transit, bicycling, and pedestrian infrastructure in our neighborhoods first, and put people and transit before freeways
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- **Achieve bold goals and comply with local and state laws:** Meet or exceed the draft climate plan's goals to cut carbon in half, use alternative transit for half of commutes, use 100 percent clean energy, increase our urban forests and parks and reduce waste.

The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

Nancy Toba-Laba

amoalila@hotmail.com
108 E 5TH ST

NATIONAL CITY, California, 91950

From: [mike clewis](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); [CouncilMember Lorie Zapf](#); [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Friday, May 01, 2015 7:19:39 PM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

The Climate Action Plan should be strengthened to achieve:

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- **Achieve bold goals and comply with local and state laws:** Meet or exceed the draft climate plan's goals to cut carbon in half, use alternative transit for half of commutes, use 100 percent clean energy, increase our urban forests and parks and reduce waste.

The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

mike clewis
professional mover
miconeil@hotmail.com
2665 Gst #11

san diego, california, 92102

From: [Brina-Rae Schuchman](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); [CouncilMember Lorie Zapf](#); [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Friday, May 01, 2015 11:09:20 PM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

The Climate Action Plan should be strengthened to achieve:

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- **Achieve bold goals and comply with local and state laws:** Meet or exceed the draft climate plan's goals to cut carbon in half, use alternative transit for half of commutes, use 100 percent clean energy, increase our urban forests and parks and reduce waste.

Please dare to include thinking and planning for RISING SEA WATERS that will require MAJOR adaptations, almost beyond our ability to handle, yet will demand that we do.

The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

Brina-Rae Schuchman

Ms.

womenact@cox.net

6221 Del Paso Avenue

San Diego, CA, 92120-3133

From: [Dana Monroe](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); [CouncilMember Lorie Zapf](#); [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Saturday, May 02, 2015 12:03:46 PM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

The Climate Action Plan should be strengthened to achieve:

- **Transportation justice:** Invest in transit, bicycling, and pedestrian infrastructure in our neighborhoods first, and put people and transit before freeways
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- **Climate change resilience:** Protect our natural resources, wildlife, coastline, infrastructure, and public health from the harmful impacts of climate change
- **Achieve bold goals and comply with local and state laws:** Meet or exceed the draft climate plan's goals to cut carbon in half, use alternative transit for half of commutes, use 100 percent clean energy, increase our urban forests and parks and reduce waste.

The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

Dana Monroe

danamonroe@cox.net
3535 Juniper St

San Diego, California, 92104

From: [Jane Naseem](#)
To: [DSD EAS](#)
Cc: [Mayor Kevin Faulconer](#); [Councilmember Sherri Lightner](#); [CouncilMember Lorie Zapf](#); [Councilmember Todd Gloria](#); [Councilmember Myrtle Cole](#); [Councilmember Mark Kersey](#); [CouncilMember Chris Cate](#); [Councilmember Scott Sherman](#); [CouncilMember David Alvarez](#)
Subject: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action
Date: Thursday, May 14, 2015 9:02:40 AM

RE: San Diego Climate Action Plan: Put Our Neighborhoods First for Climate Action

Dear San Diego Mayor Faulconer, City Councilmembers and Planning Department,

I urge you to approve an enforceable and comprehensive Climate Action Plan that commits to climate justice and protects, invests in, and takes action first in neighborhoods that are impacted first and worst by climate change and pollution.

The Climate Action Plan should be strengthened to achieve:

- **Transportation justice:** Invest in transit, bicycling, and pedestrian infrastructure in our neighborhoods first, and put people and transit before freeways
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- **Jobs:** Create good-paying jobs for local residents
- **Climate change resilience:** Protect our natural resources, wildlife, coastline, infrastructure, and public health from the harmful impacts of climate change
- **Achieve bold goals and comply with local and state laws:** Meet or exceed the draft climate plan's goals to cut carbon in half, use alternative transit for half of commutes, use 100 percent clean energy, increase our urban forests and parks and reduce waste.

The Climate Action Plan's environmental review should analyze and endorse these recommendations to protect and prioritize neighborhoods that are most impacted by climate change.

Thank you for supporting a healthy, sustainable, and just future for San Diego.

Sincerely,

Jane Naseem

janeoslin@gmail.com
4863 Bancroft St

San Diego, CA, 92116

From: 1
Subject: Start here, start now: Put our communities first for climate action
Date: Sunday, May 24, 2015 4:35:15 AM

Neighborhoods hit first and worst by climate change should be first for climate action.

The proposed City of San Diego Climate Action Plan doesn't do that.

Mayor and City Council-- Protect San Diego from climate change with a strong and enforceable plan that achieves:

- **Transportation justice:** Invest immediately in transit, bicycling and pedestrian infrastructure and measures in our neighborhoods first.
- **Energy justice:** Put solar in our neighborhoods, give San Diegans 100 percent clean energy and require new and existing buildings to be energy and water efficient.
- **Quality jobs:** Create good-paying jobs with skilled training for local residents.
- **Climate change resilience:** Protect our natural resources, water supply, wildlife, coastline, infrastructure and public health and safety from the harmful impacts of climate change.
- **Science-based goals and compliance with state law and City General Plan:** Meet or exceed the draft Climate Action Plan's goals to cut carbon pollution in half, use 100 percent clean energy, use alternative transit for half of commutes, increase our urban forests and reduce waste.

1

1

1

1

1

ca

1

IP: 188.230.57.47

From: [Mia Bolton](#)
Subject: Start here, start now: Put our communities first for climate action
Date: Wednesday, May 13, 2015 4:27:42 PM

Neighborhoods hit first and worst by climate change should be first for climate action.

The proposed City of San Diego Climate Action Plan doesn't do that.

Mayor and City Council-- Protect San Diego from climate change with a strong and enforceable plan that achieves:

- **Transportation justice:** Invest immediately in transit, bicycling and pedestrian infrastructure and measures in our neighborhoods first.
- **Energy justice:** Put solar in our neighborhoods, give San Diegans 100 percent clean energy and require new and existing buildings to be energy and water efficient.
- **Quality jobs:** Create good-paying jobs with skilled training for local residents.
- **Climate change resilience:** Protect our natural resources, water supply, wildlife, coastline, infrastructure and public health and safety from the harmful impacts of climate change.
- **Science-based goals and compliance with state law and City General Plan:** Meet or exceed the draft Climate Action Plan's goals to cut carbon pollution in half, use 100 percent clean energy, use alternative transit for half of commutes, increase our urban forests and reduce waste.

Please prioritize climate action in the San Diego communities that need help most. It's only our livelihoods and our futures that depend on it.

Mia Bolton
miakbolton@gmail.com
5116 Narragansett Ave.
San Diego
CA
92107

IP: 4.15.240.83

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APPENDIX 5

Scoping Meeting Sign-in Sheet

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**For the
CLIMATE ACTION PLAN
ENVIRONMENTAL IMPACT REPORT SCOPING MEETING
Monday, March 2, 2015**

CLIMATE ACTION PLAN

Monday, March 2, 2015

[illegible]

SIGN IN SHEET

For the
CLIMATE ACTION PLAN
ENVIRONMENTAL IMPACT REPORT SCOPING MEETING
Monday, March 2, 2015

NAME (PLEASE PRINT)	ADDRESS (PLEASE PRINT AND INCLUDE CITY, STATE & ZIP CODE) OR EMAIL ADDRESS
Sylvia Ollinger	9050 Flanders Dr San Diego, CA 92124
Rodrigo De La Rosa	3226 Newson Ave SD, CA 92113
Rosario Garcia	952 22nd St SD 92102
Muz Palomino	2463 K. St SD CA 92102
Raymond. Paulson	6369 SDCA 92111 raymond.paulson@gmail.com
Phil Petrie	4047 Louisiana St SD, CA 92104
Louise Russell	3407 MISSISSIPPI ST SD, 92104
Angela Deegan	3885 BASS ST, LA MESA, CA 91941
Kimberly McKinley	Kimocceanbeach@yahoo.com
DOUGLAS KOT	2248 CUSHING ROAD SAN DIEGO CA 92106
Mary Lou Finley	5041 Guava Ave, Apt. 110 La Mesa S.D. CA 91942
Howard Lee	City of La Mesa (staff) Planning
Chris Jacobs	City of La Mesa (staff) Planning

For the
CLIMATE ACTION PLAN
ENVIRONMENTAL IMPACT REPORT SCOPING MEETING
Monday, March 2, 2015

For the

CLIMATE ACTION PLAN

ENVIRONMENTAL IMPACT REPORT SCOPING MEETING

Monday, March 2, 2015

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For the
CLIMATE ACTION PLAN

Monday, March 2, 2015

[illegible]

SIGN IN SHEET

**For the
CLIMATE ACTION PLAN
ENVIRONMENTAL IMPACT REPORT SCOPING MEETING
Monday, March 2, 2015**

[illegible]

For the

ENVIRONMENTAL IMPACT REPORT SCOPING MEETING

Monday, March 2, 2015

[illegible]

APPENDIX 6

Scoping Meeting Comments

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3/2/15 SD Planning Department, Re CAP's NOP & Scope

5 PM to 7 PM; Balboa Park Club; 2144 Pan American Road West San Diego CA 92101

Michael Bullock, Sierra Club San Diego Transportation Chair

March 2, 2015

1800 Bayberry Drive; Oceanside, CA 92054; 760-754-8025

(346 words = 2.8 minutes)

Associate Planner Malone and City of San Diego Planning Department Staff:

I am Mike Bullock, Transportation Chair for the San Diego Sierra Club.

The City's 2007 General Plan promises to do a Climate Action Plan that will at least comply with state laws regarding climate. Now you have a draft Climate Action Plan and have recognized the CEQA obligation to prepare a Program level EIR.

The CAP and its Program EIR must include a climate-stabilizing set of Greenhouse gas emission targets, based on current science. The derivation must be shown so the public and decision makers understand how it has been determined that the target set is sufficient to prevent climate de-stabilization.

Climate destabilization should be fully described.

These documents must have a clear connection between the action items in the CAP and what are identified as the required mitigation measures to reduce the GHG emissions to the target levels.

For these measures, or action items, to be meaningful they must be quantified and be enforceable and the process for enforcement needs to be specified. This was one of the flaws with the County of San Diego CAP and it is one that we hope you avoid by doing it right from the beginning. And of course for measures to be reasonable and enforceable, there also needs to be adequate funding.

We also support a CAP (or alternative to the CAP, included in the Program EIR Alternatives Analysis) that commits a fair-share of resources to low-income and underserved neighborhoods that are most impacted by climate change. Transit, complete streets, Transit Oriented Development, roof-top solar, neighborhood-scale solar, energy storage, micro grids, new parks, and affordable housing should all be included as part of either the CAP or the new alternative.

Regarding the planting of trees and the creation of new neighborhood parks, with stands of trees, we are pleased that the CAP includes both the carbon sequestration, which you properly recognize as a mitigation measure and the cooling effect on hot days, which you properly recognize as adaptation.

Reliable and well-defined funding must be included.

Thank you

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CITY OF SAN DIEGO

PLANNING DEPARTMENT ENVIRONMENTAL ANALYSIS PUBLIC SCOPING MEETING

CLIMATE ACTION PLAN // MARCH 2, 2015

This meeting is being held pursuant to the *California Public Resources Code Section 21083.9 et seq.*, and is provide to give the public and interested parties an opportunity to submit comments regarding the potential environmental impacts of the proposed project. This information will be used to develop the scope and content of the proposed Environmental Impact Report (EIR) for the project to be described at this meeting. Please record your comments in the space provided below and submit this form to City staff at the conclusion of the meeting or you can mail to the address noted on the back of this form. Thank You.

Comments: I would like to make sure that Commercial entities are not exempted or excludes from the Community Choice Aggregate. Currently SDGE blocks Community entities such as Schools & Military Bases from obtaining Solar Panels, thereby denying these entities the same cost savings that individual families get. These tax dollars could be put towards much needed programs within these entities.

Name Rera Marrocco

Signature [Signature]

Address 1135 York Dr., Vista, CA 92084

Use back of sheet if additional space is necessary.

DISEASE@SanDiego for
up to March 20

Rebecca Malone,
Associate Planner

City of San Diego
Planning Dept.
1222 First Ave. MS 501
San Diego, 92101



CITY OF SAN DIEGO

PLANNING DEPARTMENT ENVIRONMENTAL ANALYSIS PUBLIC SCOPING MEETING

CLIMATE ACTION PLAN // MARCH 2, 2015

This meeting is being held pursuant to the *California Public Resources Code Section 21083.9 et seq.*, and is provide to give the public and interested parties an opportunity to submit comments regarding the potential environmental impacts of the proposed project. This information will be used to develop the scope and content of the proposed Environmental Impact Report (EIR) for the project to be described at this meeting. Please record your comments in the space provided below and submit this form to City staff at the conclusion of the meeting or you can mail to the address noted on the back of this form. Thank You.

Comments: The PEIR needs to ensure that the CAP meets state greenhouse gas emission targets, including AB 32 : S-3-05; it to provide an analysis of what happens if these targets are not met. All energy ordinances proposed in the PEIR need to be analyzed with respect to the state's loading order, by prioritizing investments in energy efficiency first, then local renewable energy that is tied with investment in battery storage. An energy disclosure ordinance, as proposed in the current CAP - will not get us the needed reductions in energy use. Voluntary measures (e.g. for water reduction) need to have robust analysis to ensure that the stated targets in the appendices can be met.

Name EMILY WIER

Signature Emily Wi

Address 4146 Bachman Pl #B, San Diego 92103

Use back of sheet if additional space is necessary.

climate change affects native species found in San Diego, that are covered under the MSCP (Multiple Species Conservation Program). These species are declining due to a loss of habitat and climate change exacerbates that ~~that~~ decline. Will the emissions reductions measured proposed in the CAP be sufficient to ensure that there will be no significant effects on these species? A robust analysis of these species and their resilience to climate change needs to be proposed. Potential mitigation measures that need to be analyzed include reviewing the MHPA Boundary, and potentially setting aside habitat upslope (e.g. higher elevations) to ensure that species can effectively migrate as habitats change, wildfires devastate our wildlands, and threaten our species biodiversity.

The PEIR needs to prioritize investments in sensitive receptors as described by CalEnviroScreen. These are the communities that are hit hardest by climate change, & least able to adapt.

This plan's participation process needs to be transparent and open. There are no City of San Diego, Planning Department
Attn: Rebecca Malone, Associate Planner
1222 First Avenue, MS 501
San Diego, CA 92101 technical appendices available to the public, and there has been no outreach to stakeholders. I have testified before City Staff about the need for public education to occur on climate change and the PEIR. Furthermore, there has been still no release of the adaptation plan. We need this information available to the public as we go through the CEQA process.



CITY OF SAN DIEGO

PLANNING DEPARTMENT
ENVIRONMENTAL ANALYSIS

PUBLIC SCOPING MEETING

CLIMATE ACTION PLAN // MARCH 2, 2015

This meeting is being held pursuant to the *California Public Resources Code Section 21083.9 et seq.*, and is provide to give the public and interested parties an opportunity to submit comments regarding the potential environmental impacts of the proposed project. This information will be used to develop the scope and content of the proposed Environmental Impact Report (EIR) for the project to be described at this meeting. Please record your comments in the space provided below and submit this form to City staff at the conclusion of the meeting or you can mail to the address noted on the back of this form. Thank You.

Comments:

I am speaking as a volunteer for the Unitarian Universalist Church's Justice Ministry. We worked in a coalition for AB 32 and Human Right to water legislation with a view of equity and justice. It is important that this EIR draft does not place an undue cost burden on lower income, lower served communities. We sorely can increase the 9 gallons per capita of water saved for 2020 and 9 gallons by 2035 cited on page 35 of CAP. We can do this by targeting the highest water users/wasters. Also the County's desalination plant that will feed our water region produces a high amount of G.H.G. per gallon of water and costs more than other methods. Hopefully we will NOT design or vote for such strategies.

Name

Kathy Smith

Signature

Address

10208 Avenida Magnifica, San Diego, Ca

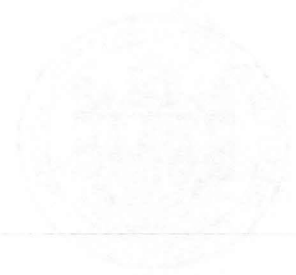
92131

Use back of sheet if additional space is necessary.

CITY OF SAN DIEGO

PLANNING DEPARTMENT

1222 FIRST AVENUE, MS 501



City of San Diego, Planning Department
Attn: Rebecca Malone, Associate Planner
1222 First Avenue, MS 501
San Diego, CA 92101



CITY OF SAN DIEGO

PLANNING DEPARTMENT

ENVIRONMENTAL ANALYSIS

PUBLIC SCOPING MEETING

CLIMATE ACTION PLAN // MARCH 2, 2015

This meeting is being held pursuant to the *California Public Resources Code Section 21083.9 et seq.*, and is provide to give the public and interested parties an opportunity to submit comments regarding the potential environmental impacts of the proposed project. This information will be used to develop the scope and content of the proposed Environmental Impact Report (EIR) for the project to be described at this meeting. Please record your comments in the space provided below and submit this form to City staff at the conclusion of the meeting or you can mail to the address noted on the back of this form. Thank You.

Comments: The EIR should have a goal of maximizing the greenhouse gas emission reductions to the extent possible and at least meeting California's GHG reduction requirements under S-3-05 and AB32. To date the plan does not contain enough detail to ascertain how effectively the measures in the plan meet the above targets. The EIR should analyze: how well the plan achieves the GHG reduction goals; how well the proposed measures conform to the State's Loading Order (which prioritizes efficiency and renewable energy); how well the measures maximize transition of commuting from single occupancy vehicles to transit, carpooling, biking, walking & telecommuting; OVER →

Name Masada Disenhouse

Signature Melisenhouse

Address 9318 Carmichael Dr. La Mesa CA 91941

Use back of sheet if additional space is necessary.

Cont.

how well the measures ensure that our most impacted neighborhoods are prioritized for infrastructure and jobs related to climate mitigation; how well the plan works to reach 100% renewable energy asap but no later than 2035; and how well the plan addresses adaptation to and avoids ^{the} costs of delaying action on climate change, including costs associated w/ more frequent & intense wildfires, drought, sea level rise, ~~and energy use, and~~ more heatwaves, and ~~the~~ increases in respiratory, cardiac, and infectious diseases. ~~associated~~

City of San Diego, Planning Department
Attn: Rebecca Malone, Associate Planner
1222 First Avenue, MS 501
San Diego, CA 92101



CITY OF SAN DIEGO

PLANNING DEPARTMENT
ENVIRONMENTAL ANALYSIS

PUBLIC SCOPING MEETING

CLIMATE ACTION PLAN // MARCH 2, 2015

This meeting is being held pursuant to the *California Public Resources Code Section 21083.9 et seq.*, and is provide to give the public and interested parties an opportunity to submit comments regarding the potential environmental impacts of the proposed project. This information will be used to develop the scope and content of the proposed Environmental Impact Report (EIR) for the project to be described at this meeting. Please record your comments in the space provided below and submit this form to City staff at the conclusion of the meeting or you can mail to the address noted on the back of this form. Thank You.

Comments: I want to see a strong, enforceable,
measurable climate action plan that prioritizes
transit, \$ active transportation and
community choice energy

Name

Angela Deegan

Signature

Angela Deegan

Address

3885 Bass St, La Mesa, CA 91941

Use back of sheet if additional space is necessary.

CITY OF SAN DIEGO

PLANNING DEPARTMENT

1222 FIRST AVENUE, MS 501

SAN DIEGO, CALIFORNIA 92101



City of San Diego, Planning Department
Attn: Rebecca Malone, Associate Planner
1222 First Avenue, MS 501
San Diego, CA 92101



CITY OF SAN DIEGO

PLANNING DEPARTMENT ENVIRONMENTAL ANALYSIS PUBLIC SCOPING MEETING

CLIMATE ACTION PLAN // MARCH 2, 2015

This meeting is being held pursuant to the *California Public Resources Code Section 21083.9 et seq.*, and is provide to give the public and interested parties an opportunity to submit comments regarding the potential environmental impacts of the proposed project. This information will be used to develop the scope and content of the proposed Environmental Impact Report (EIR) for the project to be described at this meeting. Please record your comments in the space provided below and submit this form to City staff at the conclusion of the meeting or you can mail to the address noted on the back of this form. Thank You.

Comments:

- The CAP needs to be mandated and enforceable. That's the only way that it can be equitable, to assure everybody is participating in reducing G.H.G. emission.
- The EIR should include - as an alternative - early implementation of the "Urban transit strategy" (found in the 2050 RTP appendix) as a means to reach the G.H.G. reductions from cars.
 - The EIR should include an ^{economic} analysis of roof top solar system on homes and other ~~de~~ developed facilities as compared to importing green energy from distant areas - ~~cost effectiveness~~ ^{Green}

Name JACK SHU

Signature

Jack Shu

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Use back of sheet if additional space is necessary.

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CITY OF SAN DIEGO

PLANNING DEPARTMENT
ENVIRONMENTAL ANALYSIS

PUBLIC SCOPING MEETING

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Comments:

The environmental review needs to consider whether the reductions proposed in the CAP will be sufficient to meet the reductions outlined in the CAP. We need more than just voluntary actions to address climate change.

The CAP needs to follow the state's leading order by prioritizing energy efficiency first and then local, renewable energy such as rooftop solar.

Consider the strategy for building efficiency used by New York City to identify and target the most inefficient buildings first. In NYC 20% of the buildings consumed 80% of the energy.

Name

Nicola Moelter

Signature

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CITY OF SAN DIEGO

PLANNING DEPARTMENT

1222 FIRST AVENUE, MS 501

SAN DIEGO, CA 92101



COMMUNITY DEVELOPMENT

City of San Diego, Planning Department
Attn: Rebecca Malone, Associate Planner
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San Diego, CA 92101



CITY OF SAN DIEGO

PLANNING DEPARTMENT

ENVIRONMENTAL ANALYSIS

PUBLIC SCOPING MEETING

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Comments:

Since Air conditioning & refrigeration will be very much needed in a warming world (& San Diego will be warmer), we need to seriously address and include in The SD CAP (not just in the Ports CAP) a commitment to include phaseout of the potent ("super") GHGs, hydrofluorocarbons, which are 3,800x worse than CO₂ ton for ton. The Port offers to switch its refrigeration to HFC-32, I suppose. San Diego must too. This is a win-win (even for SANDAG): also switch ^{auto} AC HFC-134 to HFO-1234 ^{fy}, which is 99.3% less warming. The EU has required this as of Jan 1 2015, & the US EPA recommends it — & automakers, such as GM are doing it voluntarily; or auto AC should shift to CO₂ because even CO₂ is better than allowing HFC-134 to become the 3rd worst global warmer by 2035.

Name

Gabriele Schubert

Signature

Gabriele Schubert, MSc.

Address

2345 W. Jewett St., San Diego CA 92111

CAP reviewer, San Diego Foundation committee

Use back of sheet if additional space is necessary.

City of San Diego, Planning Department
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CITY OF SAN DIEGO

PLANNING DEPARTMENT ENVIRONMENTAL ANALYSIS PUBLIC SCOPING MEETING

CLIMATE ACTION PLAN // MARCH 2, 2015

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Comments: Climate change is the most important issue that we face today. San Diego should have a Climate Action Plan with ambitious, ~~onforceable~~ enforceable, and measurable policies for reducing greenhouse gas emissions. Let's become a global leader in combating climate change! To do this we need a plan that meets the ~~go~~ targets set by AB-32 and S-3-05, ^{including} ~~inculding~~ the 2035 and 2050 targets, and provides the funding for it.

Name Janina Moretti Signature Janina Moretti
Address 4032 Camino Calma San Diego, CA 92122

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CITY OF SAN DIEGO

PLANNING DEPARTMENT

1222 FIRST AVENUE, SUITE 501

SAN DIEGO, CA 92101



COMMUNITY ACTION PLAN

City of San Diego, Planning Department
Attn: Rebecca Malone, Associate Planner
1222 First Avenue, MS 501
San Diego, CA 92101



CITY OF SAN DIEGO

PLANNING DEPARTMENT

ENVIRONMENTAL ANALYSIS

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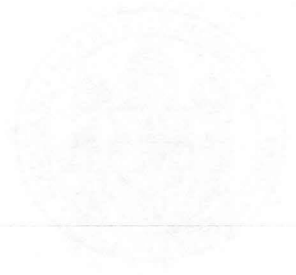
Comments: I support a Climate Action Plan that prioritizes neighborhoods ~~that~~ are hit hardest by climate change. We need a CAP that is enforceable & measurable & that implements a Community Choice Energy (CCE) program. It should also meet the 2035 & 2050 reduction targets, as required in AB 32 & S-3-05. We need to promote mass transit, walking & biking over car use.

Name Sylvia Ollinger Signature Sylvia Ollinger
Address 9050 Flanders Dr San Diego, CA 92126

Use back of sheet if additional space is necessary.

CITY OF SAN DIEGO

PUBLIC HEARING



PLANNING DEPARTMENT

City of San Diego, Planning Department
Attn: Rebecca Malone, Associate Planner
1222 First Avenue, MS 501
San Diego, CA 92101

Roddy Jerome

roddyjerome@aol.com

We need the city to act now to reduce the harmful impacts of climate change and cut carbon pollution w/ an enforceable climate action plan.

The alternate scenario should explicitly invest first in the neighborhoods who are hit first and worst by climate change or actions to: improve public transit, walking & biking access make homes & buildings efficient & healthy

through requirements; install local clean energy and create good jobs

- Raymond Paulson 6369 Camino Marcial SD CA 92121
- ① NATIONAL AMBIENT Air Quality Standards Fed and State Equiv - for Curb on. What is San Diego's fair share < 35ppm.
 - ② Community Choice for renewables necessary to ensure BEST SOLUTIONS for tax payers.
 - ③ Plan should include mandate for identifying renewable energy + efficiency mix w/ cost and payback available to the public for review + feedback.

- ④ All meaningful plans today include Life Cycle Assessment and Life Cycle Sustainability Assessment ('TRUE VALUE')
How is LCA/LCSA incorporated into San Diego Climate Action Plan? Does it include cost for sea rise, drought, bad weather and other negative impact costs to Society?
- ⑤ CEQA requires EIS - included should be (true value) sea rise, drought + safety potential!!!

APPENDIX 7

Scoping Meeting Transcript

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OPENING REMARKS:

Good evening and thank you for coming to the Environmental Impact Report public scoping meeting for the Climate Action Plan. My name is Rebecca Malone and I am an Environmental Planner for the City of San Diego's Planning Department. These meetings are referred to as EIR Scoping Meetings and are for the purpose of helping to define the scope of work for the EIR.

This meeting is required by the California Environmental Quality Act [CEQA] for projects which may have State-wide, Regional or Area-wide environmental impacts. The City's environmental review staff has determined that this project meets this threshold, and therefore scheduled this meeting to gather public input prior to the preparation of the project's environmental document.

Environmental review staff are required by the City's Municipal Code to provide the public and decision makers with independently prepared environmental documents which disclose impacts to the physical environment. This information is used by decision-makers as part of the deliberative process in approving or denying a project. The environmental document does not recommend approval or denial, but is provided as information on the environmental impacts of a project.

Now, a few comments about how the meeting will be conducted.

First, I'll provide a brief description of the project followed by a short presentation by the City's Planning Department. At the end of the meeting,

time permitting, the public is welcome to review any materials provided by staff and ask additional questions for clarification; however, these will not be part of the scoping meeting record.

This meeting is designed to get as much public input on areas that need to be addressed in the EIR in the time allotted for this meeting. Therefore, each speaker is asked to introduce themselves, state their address and complete their comments within three minutes. [Should we start to run short on time, I may need to further limit individual comment time. I will inform you if this is the case.] This entire meeting will last 2 hours and will end at 7 PM, March 2.

In addition to verbal comments, which are being taped for the record, there are forms available from City staff upon which you can provide written comments. We will need to have these comment forms submitted to City staff by the close of the meeting, or you can mail the completed form with your comments to the address listed on the back page. Please remember to put your name and address on the sign-in sheet before you leave the meeting if you would like to receive Notice of Availability for the Draft EIR.

Please refrain from conducting a debate on the merits of the project at this meeting, as this is not the purpose for tonight's gathering. Rather, please focus your comments on those environmental impacts you would like thoroughly analyzed in the project's environmental document. Lastly, I will be acting as the moderator and timekeeper for the duration of the meeting and, therefore, would respectfully request that you yield when

notified that your three minutes are up.

This meeting is being conducted in accordance with CEQA for the Climate Action Plan on Monday, March 2, 2015 at 5:00 p.m.

Thank you for your patience. We'll now begin with a brief presentation by the Planning Department.

BRIAN:

The City of San Diego Planning Department is seeking CITY COUNCIL APPROVAL for the adoption of the Climate Action Plan [CAP] and implementing regulations or policies, which may require amendments to the Municipal Code and/or Land Development Code. Former Governor Arnold Schwarzenegger's Executive Order S-3-05 established the 2050 statewide GHG reduction target of 80 percent below 1990 levels. The City of San Diego has prepared a draft CAP that identifies measures to effectively meet greenhouse gas [GHG] reduction targets for 2020 and 2035, as "interim" targets for achieving the 2050 target. The CAP estimates the GHG emissions for the City of San Diego in the baseline year 2010 to be around 12.8 million metric tons of carbon dioxide equivalent [MMT CO₂e]. By 2020 the CAP estimates the City's emissions would increase to 13.9 MMT CO₂e, and to around 16.2 MMT CO₂e by 2035. With implementation of the CAP, the City aims to reduce emissions 15 percent below the 2010 baseline by 2020 to around 10.9 MMT CO₂e, and by a total of 49 percent by 2035 to 6.4 MMT CO₂e. With implementation of the CAP, it is anticipated that the City would exceed its reduction target by 0.9 MMT CO₂e in 2020

and 155,600 MT CO₂e in 2035. The CAP relies on significant City and regional actions, continued implementation of federal and state mandates, and five local strategies with associated action steps for target attainment. The five strategy areas are:

Water & Energy Efficient Buildings;

Clean & Renewable Energy;

Bicycling, Walking, Transit & Land Use;

Zero Waste; and

Climate Resiliency.

Implementation of the CAP is divided into:

Early Actions [Adoption of the CAP-December 31, 2017],

Mid-Term Actions [January 1, 2018-December 31, 2020], and

Longer-Term Actions [2021-2035].

Through 2020, the CAP meets the requirements set forth in CEQA Guidelines Section 15183.5, whereby a lead agency [e.g. the City of San Diego] may analyze and mitigate the significant effects of GHG emissions at a programmatic level, such as in a general plan, a long range development plan, or a separate plan to reduce GHG emissions. Following adoption of the CAP, eligible individual projects preparing project-specific

environmental documents may tier from and/or incorporate by reference the CAP's programmatic review of GHG impacts in their cumulative impacts analysis.

At this point, the Planning Department will make a brief presentation of the project.

BEGIN TRANSCRIPT:

I'm going to briefly go through the presentation bare with me. It's similar to a presentation we provided for the City Council's Committee meeting back in October.

On September 14, there... city council, Gloria, Councilmember Lightener, the updated 2014 Climate Action Plan highlighting many of the benefits to the environment and to the economy.

The draft climate action plans establishes a road map achieving Governor Schwarzenegger's executive order S305 which establishes 2050 statewide greenhouse gas reduction targets. The plan will also help San Diego become a leader in clean technology, renewable energy, and green jobs. Further, the capitol will implement the City's General Plan.

The cap supports numerous general plan policies, including: implementation of the city's ... strategy, the conservation element, and the

mobility element. The four primary purposes of the climate action plan include a roadmap to see greenhouse gas reduction, supports the California regulations, implements the general plan, and provide ... for new development for greenhouse gas emissions.

The CAP includes a 2010 baseline emission inventory. As demonstrated by this figure, the transportation sector contributes the largest output of greenhouse gas emissions due primarily to the single occupancy vehicle trips. This is followed by the energy structure and the waste emissions.

This figure depicts the 2010 baseline with the projected business-as-usual emission levels in blue and reduction targets for 2020 in blue and 2025 in orange. As I mentioned, the CAP has five goal strategies for greenhouse gas emissions for 2020 and 2035 targets. These targets will leverage the city's existing resources and provide clear direction of actions to be presented to city council for future consideration.

Also I want to emphasize that this is not a top-down plan, this requires broad participation from all San Diegans.

The energy- and water-efficient building strategy includes such actions as presenting to City council for consideration energy and water conservation disclosure ordinances, as well as the municipal energy strategy and implementation plan.

The clean renewable energy strategy includes the goal of achieving 100% renewable energy from the City's electrical grid by 2025.

The bicycle, walking, transit, and land use strategy includes the goal of achieving 50% of community trips in transit priority areas to take place by 2035. The zero waste strategy includes such action as presenting to city council for consideration a zero waste plan to divert solid waste and capture landfill, solid waste, and methane gas emissions.

The climate [resilience] strategy includes presenting to City council a city wide urban tree planting program as well as policy directions for a pair or stand-alone ... adaptation plan.

The next steps including the preparation of the environmental document followed by a city council adoption process, and followed by annual monitoring of the plan once it's adopted.

Ok what we're going to do in addition to taking the comments that we're going to take tonight. You can still submit comments on the notice of preparation for the EIR up to March 20th of 2015 – so there's a few more weeks left. You can send them via email at dsdeas@sanidiego.gov or you can send them by mail to Rebecca Malone at the address on the screen, and we'll leave this up here for a little while.

So what we're going to do right now is start taking comments from the public, and just one more thing that I'm going to let you know is that we are recording comments so we make sure we get all your comments. We do have a digital recording device. We will be recording all your comments.

So what we're going to do is we're now going to switch the microphone and point it around. You can come up, line up, and as Rebecca mentioned we're going to have you enter your comments into the microphone. Any special requests. Please do it in an orderly fashion. Everyone will have the opportunity to speak so give us about two minutes to rearrange the setting here, then you can just form a line down the middle of the row. And if you have any special requests, let us know.

[ADDITONAL INSTRUCTIONS GIVEN]

Q: Hello. My name is Raven Olsen. I work for the Navy as an environmental engineer. We've been very active in the sustainability process. And I have comments for the San Diego Plan. All meaningful plans today include life-cycle assessment and life-cycle sustainability assessment. Is LTA and LTSA incorporated into the decision making process for the plan for the best value for the taxpayer, and is it then consider are those cost for potential sea-rise cost, property loss, and drought and other negative impact that global warming can bring. Also your CEQA requires an Environmental Impact Statement and again are you including potential sea-rise, drought, and other negative global

warming impacts to your environmental impact statement for CEQA. That's my question.

Q: Good Evening, Associate Planner Malone and City of San Diego Planning Department Staff. I am Mike Bullock, and I am the transportation chair for the San Diego Sierra Club. The City's 2007 General Plan promises to do a Climate Action Plan that will at least comply with state laws regarding climate. Now you have a draft climate action plan has recognized the CEQA obligation to prepare a program-level EIR. The Climate Action Plan and its program EIR must include a climate-stabilizing set of greenhouse [definition/Emission] cards based on current science. The ... must be shown so the public and decision-makers understand how it determined that the target [stat] is sufficient to prevent climate destabilization. Climate Destabilization should also be fully [discarded]. These documents must have a clear connection between the action items in the climate action plan and what are identified as the required mitigation measures to reduce the greenhouse gas emissions to those climate stabilizing target levels. For these measures or action items to be meaningful, they must be quantified and enforceable, and the process for enforcement needs to be specified. This is one of the flaws with the County of San Diego Climate Action Plan, and it is one that we hope you avoid by doing it right from the beginning. And of course for measures to be reasonable and enforceable, there also needs to be adequate funding. We also support a climate action plan, or perhaps an alternative to the climate action plan included in the program EIR Alternatives Analysis, that commits a fair share of local resources to low-income and underserved neighborhoods that are most effected by climate change. Transit [complete streets], transit-oriented development, roof-top solar, neighborhood scale solar, energy storage, micro-grids new parks, and affordable housing

should all be included as part of either in the climate action plan or the alternative study.

Regarding the planting of trees and the creation of new neighborhood parks with standing trees, we are pleased that the climate action plan includes both the carbon sequestration, which you properly recognize as a mitigation measure and the cooling on [blockades] which you properly recognize as adaption.

In all cases, reliable and well-defined funding must be included. Thank you.

18:33

Hi, ... Lopez with the Environmental Health Coalition . I am a resident of the Sherman Heights neighborhood. The climate action plan has some very solid and tangible goal when it comes to transportation, and the shifting over the most from single-occupied vehicles which we saw [as most specific to] climate change here in San Diego. What I want to focus on is the solid goals, the how and the where. In reviewing the Climate Action Plan, I would like an emphasis on the how and the where.

How? We have these goals but do we have the funding in place that will make sure that these goals are accomplished? And one way to make sure that this is accomplished is finding/tying transpiration funding directing the [most] shared goals. So if our goal is 6% biking by 2020, at least 6% of the city's transportation funding should match that, and it currently doesn't.

[19:45] Where? We've heard a lot about who are most impacted by climate change. And those most impacted by climate change are the neighborhoods of Sherman Heights, City Heights, Barrio Logan, Logan Heights. And these neighborhoods can be easily identified using a [Cali page fold] called the CalEnviroScreen. And what we'd like to see are those neighborhoods identified and CalEnviroScreen... the neighborhoods that are prioritized for funding first when it comes to implementing biking, walking and transit infrastructure.

Additionally, how are we going to get there if our political leaders continue to support a regional transportation plan that is heavily focused on freeway expansion-type projects? I'll give you one example that goes right to the heart of San Diego. Right now our regional transportation plan, there are plans to expand the 94 freeway by two lanes. How can the city accomplish their goals of reducing vehicle miles traveled, of having a good mode-share in biking, walking and transit, if we are expanding lanes that will lead to more vehicle travel which will essentially lead to more greenhouse gases? You're all planners; you know that's where it will head. So it's important the how that the city, look at what's going on in regional planning. These are the freeways that go through the very communities which I mentioned to be prioritized. So to recap, the how: tying funding and mode-share goals, the where: look at CalEnviroScreen communities. And also another *how* is lining up the great goals with regional planning that's going on at the SANDAG level. Thank you.

21:54

Hello. My name is Jack Qu. I'm here to represent the Universal... ministry of California. We're a ... organization and the reason I'm here is because the climate action plan affects people. And we know that Climate Change affects people that are of color and poorer areas. Unfortunately, a lot of

what we try to do for climate change disproportionately puts the burden of costs on those populations, and that shouldn't happen.

That's something that this EIR should have analyzed, analyzed effects of your measures, your mitigation to different populations. Not only should the public benefit from these changes but the cost should not be disproportionately based off of it. For example, the Climate Action Plan that you have out now deals with transit centers instead of just dealing with transit centers we should deal with entire poor areas and neighborhoods. And those ... should be made.

We know now, the planners know, that justly going in a circle around a transit center and saying that people will get there in 15 minutes in a quarter mile or half mile radius is not good planning. An EIR should look into those issues and deeper than that instead of coming up with simple goals.

Another [adept], we need mandated and enforceable goals, surely measures within the plan that will evoke those kinds of mandates and measures particularly if we are not meeting our goals - of meeting the hardest of the plan.

Thus we can be assured that this plan is effecting, participating with everyone. If we mandate something and make sure everyone does it, then it works. But basing the costs of climate or reducing green house gas emissions on a few ... populations is something that's not fair. One more example is we plan to reduce DMT. We know who's creating the DMT. It's not the poor, it's not the communities that are being affected by plan that looks into the effects of DMT reduction, who needs to have the DMT reduction, and how can we do that. What are the city policies that can affect that? We need a climate action plan that will not allow auto-centric developments to go unprepared for the fiscal now.

That's the kind of action plan that we need now, that will affect adequate change to city policies. Thank you.

24:45

Good evening. My name is Rodney Gerome. I live in San Ysidro. I am here today because my neighborhood needs and deserves a San Diego Climate Action Plan that puts our neighborhoods first. I have lived in San Diego 25 years. I love San Diego. But I know my neighborhood can be improved and needs to be improved.

I think [I've seen two seniors in wheelchair in a typical any route of public transportation], and I can only imagine where she goes to when she's by herself. Does she's not very often. But there are times when she has to do by herself, and just knowing as I help her with the poor handicap access on public transportation that needs a lot of improvements it's difficult. This is why it is important for San Ysidro and neighborhoods like San Ysidro to be first in any climate action plan for San Diego.

I understand family challenges apply to all of us, but I understand that it will have a different impact in different communities. You know [people get] on the trolley on a hot day because they live in old homes with no air conditioning, and it ain't easy need to get to cooler places where they have a lot of parks or trees.

You can't go to the doctor when you get sick because there's no public access or transportation optionsBicycling and walking are due to lack of adequacy of bike lanes and sidewalks. You know climate change in our neighborhood presents a great threat to seniors and children who have already suffered health issues.

For these reasons I am demanding that climate action plan focus on neighborhoods like mine that need help the most. Thank you.

26:30

I'm Hillary with the Environmental Health Coalition. I'm going to go through both some of the tools we think you should use to analyze the plans as well as ... an alternative we think you should analyze.

And so for the plan we think you should analyze compliance with state laws 8032 and S305 through 2035 not just 2020 as well as compliance with the City's General Plan and if not in compliance the EIR should outline how the plan could come into compliance.

The plan could also analyze the extent to which the actions are enforceable and will actually achieve the target. The plan or the EIR should also analyze the air quality impact and economic impact, not just of the actions of the plan but of climate change and pollution on sensitive receptors in areas with high cumulative impact.

And how CalEnviroScreen is a tool you can use to identify those areas. And I think what you'll find right now is that the climate plan is not specifically prioritizing those areas of high cumulative impact for pollution reduction and so in order to help you with that analysis and improve the air quality in those areas we urge you to analyze an alternative scenario that prioritizes the disadvantaged neighborhoods first in order to achieve the climate plan social equity goal. And so we hope that alternative scenario will achieve all of the goals that have been outlined in the plan but take actions to prioritize those neighborhoods so, as Lopez said earlier, for transportation, that investment city's money for sidewalks and for bike lanes, to the CAP in the CalEnviroScreen the disadvantaged neighborhoods

first, and the city should be tied to supporting in the regional transportation plan that puts people in transit before freeway expansion.

And for energy efficiency, as [Brian] said there are folks in our neighborhood who don't have efficient homes, don't have solar, and we need to make sure that the plan is actually getting solar in our neighborhoods and is actually getting the efficiency upgrades that they need until we are due to analyze that alternative and we'll submit more detailed written comments. Thank you.

29:07

TRANSLATOR:

GOOD EVENING. My name is Ariana Garcia. I live in National City and been there for eight years, but I am here today because I believe this plan will end up affecting our entire region. I may not live in San Diego but just like a lot of my friends and people I know in City Heights, Sherman, and Logan heights, my community is similar to theirs in that it's very impacted by pollution.

I live in an area that surrounded by auto body shops, auto body paint shops, and those shops effects the health of residents in our neighborhood. And it affects especially children affected with asthma and other respiratory problems.

Today I am here alongside San Diego residents because I understand that San Diego is the biggest city in our region and so this climate plan in San Diego will affect the whole region. It will. Also the decisions made with this plan will probably impact the decisions made by other cities.

Hopefully San Diego sees the importance of starting with the most impacted neighborhoods and other cities like National City can take the same [action]. Climate change impacts all of us. The reality is that it will impact some of us more than others.

We need action taken by the city. We need a climate plan that reduces the dangerous impact of climate change. That is why I am here asking and we are here asking that communities that are most impacted are where the climate action plan is taken first. I was hoping you would do that here in San Diego. We thank you for taking our comments into account. I hope you will listen to our suggestions.

32:30

Good evening. My name is Cathy Smith. I am from [Scripps Unitary] of San Diego. I'm here tonight speaking as a volunteer for the Unitarian Universalist Justice Ministry. We did work in the coalition for 8032 and the Human Right to Water legislation which we recently passed. We take a view of equity and justice. Some of the speakers have spoken of before. And it's very important to us that this EIR draft doesn't not place an undue cost burden on lower-income and lower-served communities.

For example, on page 35 of the EAT, sure we can do better and increase our conservation goals of 4 gallons per capita for 2020 and the state is 9 gallons by 2035. If we could do this by targeting the highest water usage, or water wasters. also the county's desalinization plant that does feed our water region produces a high amount of greenhouse gases per gallon of water [or] more, and hopefully we will not do all of this example or vote for such strategies. Thank you.

33:55

... Good evening I'm representing the American Lung Association of California.... already. I'm probably going to duplicate a couple of them and hopefully add a few more. There not doubt that once again the City of San Diego is on the leading edge of doing this. We've seen this happen at the county and SANDAG, so hopefully we've learned some lessons and will get this right the first time.

There's a sense of urgency to adopt the city's climate action plan, but we need to see the technical tendencies. We need to see in regards to what exactly is the implementation of that climate action plan. So we would hope that would get out before you get too far into the EIR. The EIR measures the public health impact of the baseline alternative as well as the public health benefits of the plan and any alternative.

The EIR needs to identify those green house gas reduction strategies that maximize full benefits of reducing air pollutants and providing drastic public health improvement. The EIR [discussed has a plan that] is enforceable and has measurable performance measures to meet the long term green house gas reduction targets. The EIR looks best [I think] how [Brian] mentioned is how the climate action plan steps within the City's General Plan [including the city villages] ... mentions a significant portion of green house gasses come from [road trips], from single-occupancy cars to transit, walking and biking. The resources needed to achieve those [road-trips] rather than third parities... The EIR must identify alternatives in the event those motions that don't or can't happen because of a lack of transportation investment. I hope that doesn't happen because that's a possibility.

Last, the EIR should identify an alternative that is more aggressive than the draft climate action plan ... greenhouse gas reduction against the socio-economic impact ... Thank you.

35:55

TRANSLATOR: Good Evening. My name is Rosario Rosia. I live in the community of Sherman Heights. I'm here today to talk about climate change, an issue that is very critical and affects the health of many residents in my community and throughout San Diego. We need the city to take action for the strong climate plan in order to reduce the dangerous impact that we're living in our communities. They impact our daily lives especially the health of our children. All of ... clean air. The residents in my community want a strong plan adopted and that the focus of this plan is correctly focused on a neighborhood most needed. In order to improve the environment our communities need to come first, because they are the ones stuck with the biggest impact. Thank you.

38:10

Good evening. I'm ... from La Mesa. and I think like to speak in favor of the community .. Energy. And the reason why this is important is because SDG&E being a for-profit organization has goals which are not aligned with those of the people of San Diego and with the climate action plan. Specifically the EIR goal is to make money. They're not concerned about the climate. They know this, for example, from the rise structure that the SDG&E has submitted to the California Public Utilities Commission [CPUC] for approval. That raise structure has two main provisions. 1] is a fixed monthly charge of \$10 a month starting in 2017 and rising every year

after that. And there are planning on flattening the ... which are two tier close together. So either one of those features has the effect of de-incentivizing energy conservation and de-incentivizing rooftop solar. SDG&E 's goal is to sell electricity. They don't do that to people who have rooftop solar and they don't do that to conserve energy. So a community choice energy program will allow us to set rates that are consistent with encouraging people to reduce greenhouse emissions and conserve energy. Thank you.

40:00

hello, good evening. My name is Eric. I live in Barrio Logan. I'm here as a resident I've been talking to my neighbors [that I will be attending this meeting, and] this is a concern for all of us in Barrio Logan. I live in seen over the years in different communities - Barrio Logan, National City, Sherman Heights - we ... in San Diego have privilege for ... communities and Communities forgotten on solutions for the environment for the air we breathe.

Over the years all people have been getting sick, cancer, asthma, so we want these plans to focus on our communities to ... program for transportation for people who can't afford it.

I use a vehicle for transportation but also I use public transportation and then our communities don't have guidelines ... so we want those programs to come to our community and how when ... houses... how they will create jobs... we want in jobs for our community. And we want those programs to come to our community like low income.

They hear all these plans, but they don't mention how people of low income can apply, how people can benefit for all these programs. So we

want the programs for our community and how ... so many ... that we ... in our community. How can you regulate diesel for gas, natural gas? So that's ... we ... so we want you guys to regulate more of these transportation... the companies... more programs to bring more clean air communitiesThank you.

42:19

Hello. My name is Emilie Weir. I live in Hillcrest. I have a couple of points to talk about today.

The first is the public participation process. I'm really concerned that it has not been really transparent up until now and I hope, and I'm happy that we're having this meeting today. For example the economic and environment sustainability passport needs to be moving forward with meetings that group forms for process for this action plan, ensuring that stakeholders are considered moving forward. Those are really important. We need to have the technical tendencies, those have not been released yet, also important in this a very public process. A goal is an adaptation plan. We've been repeatedly hearing of that coming and have not seen that yet. I checked the Logan order, this EIR needs to analyze whether the CAP is in line with the loading order as directed by the state. As you likely know that means energy efficiency first and then investments in local renewable energy. And battery shortage ... so making sure that plan follow that order.

And I think, as Bob mentioned earlier, community first energy should be considered the preferred alternative. This is the only way for the city to ensure that it has local control over its energy and can achieve 100% renewable energy goal, which I support. The plan needs to meet the state's greenhouse gas goals including 2015 and 2025 goals as Brian mentioned

needs to be enforceable and measurable. I would like to echo what Sheila Reese of Environmental Health Coalition mentioned earlier about investments in environmental justice communities and CalEnviroScreen these are ... communities that are hit hardest and first by climate change and they are the ones that are not as adapted to [the conflict level that will happen] So these need to be prioritized in the climate action plan and this EIR.

So climate change has a lot of living negative effects on our local wildlife and flora and fauna and this needs to be analyzed under the biological resources section of the EIR. And from wildfires to loss of habitat - I'm a biologist and I've seen how ... these treasured species that are consistent with San Diego, they need to be analyzed in the biological resources section. Thank you.

45:42

I'm... Vegan, I'm a volunteer with San Diego 350. I want to see a strong, enforceable, measurable climate action plan that prioritizes transit as the transportation of community choice energy. Thank you.

46:00

Hello. My name is Reina Morocco. I live in Linda Vista but I own some property in the City of San Diego... so this does impact me. I just want to make sure that the climate action plan does not exclude certain commercial entities from being covered by this or even benefiting from it. It has come to my attention that SDG&E ends up blocking military bases and the schools from getting solar panels, and that is so wrong because they don't

get the benefit of the tax dollars and their not able to save those and put those toward programs that we have [that is theirs] to go to.

So I just want to voice my support for the Community Choice Aggregate. I think that'd be a really good way of getting around that and superseding this. I just wanted to voice my support for the Community Choice Aggregate. I just wanted to [make sure] that it is applied to all. Thank you.

47:24

Hello. My name is Phil Petri. I live in North Park, and I want to thank you for having this scoping meeting about the CAP. This is what democracy looks like. Other people can address a lot of the facts much better than I. I'm an artist with a rather shaky [hand for those sorts] of facts. But I want to make this one basic point. I think it's very easy probably especially in your line of work where you're dealing with all kinds of different plans. Planning issues and so forth to think of this issue addressing climate change is just one issue among many that you have to face. I believe it is the issue, and it is the most important issue that you will face and it is all the other issues are going to be affected by this issue. So what we do about climate change now is huge. And I would urge you to do everything to make a very strong CAP and to make it enforceable. Thank you.

48:35 Hello, my name is ..., and live in La Mesa, and I am a volunteer with San Diego 350. The EIR should have a goal of maximizing the green house gas emission reduction to the extent possible and at least meeting the California greenhouse gas emissions requirements under S305 and 8032. To date the plan does not contain enough details to [act or maintain]

effectively the measures in the plan to meet the above targets, and we need those details.

The EIR should analyze how well the plan will reduce GHG reduction goals: how well those measures conform to the state's [loading order] which prioritizes efficiency and renewable energy; how well the maximizes transition of community measures from single-occupancy vehicles to transit, carpooling, biking and walking, and tele-commuting; how well the measures ensure that our most impacted neighborhoods are prioritized for infrastructure and jobs [that lead to] climate mitigation; how well the plan works to reach 100% renewable energy as soon as possible but no later than 2035; and how well the plan addresses adaptation to and avoid the costs of the delaying action on climate change, including costs associated with more frequent and intense wildfires, drought, sea-level rise, more heat wave and increases in respiratory, cardiac and infectious disease. Thank you.

50:03

Hello. My name is ...Young, I'm from the Claremont area. I just have a list of things that would be my dream. You might use to get to the goal and of course some of these have been mentioned. I think there should be a program that would help residents to be able to upgrade their homes for home efficiency. I would love to see trees planted everywhere, more at parks and schools and vacant lots and along the sidewalks. We just have too few trees in this city.

When you create bike lanes, I've heard I Europe when they put those bike lanes between parked cars and sidewalks to avoid horrible accidents that we've seen between fast moving cars and the bicycle.

I would love to see you ban fracking and any activities that use the Halliburton loophole to evade our environmental laws. And that would help a lot in lowering all of these emissions.

I believe.....mass transit, I would love to see you use up some of those freeway lanes which have already destroyed areas for our wildlife. And have already been vetted for environmental impact.

I would love to see residential programs that help us put those solar rooftops on our houses and residential programs help us reuse our water for our plants, so that we will lower the energy required because we use drinkable water to water our plants and that's energy we shouldn't have to use. Same way these two programs for solar energy and water reuse I would like to see city-wide as well and for our city and commercial buildings to have solar put on all of them and to reduce their water.

Also to replace so much concrete that we have in our city with perhaps low water uses trees and shrubs. Thank you.

52:51

Good evening. My name is Michael Bradley. I was in Hillcrest, and I am a member of San Diego 350 also. I support all the recommendations and requests made before, and I'm going to restrict my comments to only one which has to do with the green house gas reduction targets that this plan is attempting to meet, or we should. I would urge that we do better than SANDAG has been doing until now, even trying to particularly the goals of S305 for 2050. [won] a lawsuit at the very moment that we need to make great progress in this. This is total madness to me.

I feel a great sense of urgency about this, particularly because the goals that we're attempting to meet here are already almost 10 years old. Those goals were set back when S305 and AD32 were passed and they were designed to help us avoid getting the two degree to hold the temperature increase to 2 degrees centigrade. It's become clear since that time that these goals in the plan are not adequate now.

So I hope that since these are the goals of the plan you will attempt to meet them in such a way that you're prepared to meet even stronger goals because the need is that great. Thank you.

54:42

I'm Louise Russell from North Park, and I have two main items that I would like to have analyzed in the EIR. And one is to move Strategy 2 in the Clean and Renewable Action 2.1 which is to present the city council a CCA. I would like you to move it from Phase 2 to Phase 1. I think that, in general, all of the plan is so spread out that this is something we need to get happening as soon as possible. And get us to 100% renewable and give us the choice to purchase through that rather than SCG&E. The second one is strongly ... enforceable and measurable plan. Each and every one of the goals and targets and the actions listed in the plan these are absolutely essential to the plan for any kind of meeting and any kind of positive outcome. Are these going to be in the technical document that people talk about? I can't find them anywhere, I don't know if that's the place for them? So my last comment, and you've probably heard this, is a project without resources is a hallucination. And I would say that a plan without measurable and enforceable [metrics] is also a hallucination, so good luck. Thank you.

56:17

Nicole [Caprit] from the Climate Action Campaign. As many of you know, I had some hand in drafting this plan. I think I would publicly say it has been disappointing the climate action plan - I've been going around to different planning groups and the Planning Department has accepted opinion [and see the value] in doing this education outreach. ... many groups have not heard of the climate plan. And they are aching to know what it is the city is doing for providing a really important service. This is a good form, and I'm grateful and I would suggest that as you move forward in the process you think of doing a broader education outreach program than what you're currently proposing. Also what mark is submitting more detailed comments and do need see the technical tendencies but some of things that I'm a little bit concerned with in the plan is that under community choice there was new language added that said in order to achieve 100% renewable energy we'll look at community choice for a comparable program. As you all know as a legal requirement to identify exactly how you're going to meet the goals in the plan, and to use a big term like other comparable programs, doesn't define how you're voting to meet these measures. So many this is a good [measure] curious ... [we haven't seen] the technical tendencies, I would [submit that that] was a gap, and something that's going to need to be addressed. Under the smart growth and vehicle miles traveled, I'm very supportive of that measure and that goal to reduce the amount of cars on the road. But as I mentioned by Environmental Health Coalition... at this point they're there ...the question is how exactly are you going to meet and achieve these vehicle miles traveled There's got to be some kind of methodology outlined in a more detailed way. And we need to ...how you're o going to achieve those.... we obviously know that when you propose a city sustainability project often

meets with resistance, ...because it's because ... hadn't been articulated. And effective community outreach and communication before submitting the project propose, but at the same time in this plan there's going to have to be some kind of nexus between the goal of getting vehicle miles reduction and actually what that specific strategy is going to be to get there. Also as an environmental health coalition previously made in terms of the bike, walking and transit. What is it going to take to achieve these goals? I think there's a gap in the current draft that doesn't say what and how many bike lanes and how many bike lanes we're going to need and specifically how we're going to fund those bike lanes. I think that's a gap. One thing to look at when you're looking at vehicle miles traveled is the data that shows that we have affordable housing near transit. We do get vehicle miles traveled ... DMT reductions, but also specific strategies to look at meeting that goal. Also echoing 350 also be achieved measuring several weaknesses in the goal we've always known that but we've skated out of the gate. But I think in terms of when you go out and talk to community that is the piece that their most concerned with, obviously. The drought, the heat wave, the fire, the sea level rise, they really have zero idea of what the city is doing to prepare for these changes. I think there's probably going to be more specificity outlined in the plan in how we're innovating these changes into future development. ...and lastly i would echo comments on 350 and environmental health coalition overlaying the CAP social equity and how we're going to be innovating targets into strategies. That's something that we didn't do initial versions. And I think in the plan it's hopefully that's something that's going to get worked on in the process. Thank you very much.

Good evening. My name is I'm the .. of the San Diego Green party. I'd like to thank you for allowing us to speak with you tonight. As I've listened to all the people speak up until now I have seen many many options for what you can do. And many people have spoken of urgency. so i want to reinforce the idea of urgency. And the need for why San Diego in particular in the United States of America produces the most per capita than anywhere in the world. We are demanding the cause of that to act more than other places in the world. That puts things on San Diego as well. But one of the things I'm going to speak about specifically here is that there is urgency. I don't think we need to debate climate change is real. Climate change is happening, it is happening and it's going to cost money. We can pay for it now or we can pay more later. We need to pay now because every dollar you spend now is seven dollars now is just in ten years now and is fourteen dollars ten years from now is twenty-eight dollars you'll spend thirty years from now. The migration that we act on and do today is money that we save or more appropriately the next generation saves. I won't be here. In 2050, I'll be dead probably. I'm pretty old, already 50 years old. But I don't want to leave that legacy behind for the next generation. We have created this problem. We are the ones who are responsible. We need to act today to start fixing it. Thank you very much.

1:0

.....the national corps foundation. As you know, there's some mitigation that has already occurred. Originating from our county with regards to the EIR. and I hope in this EIR that the city is ...that abides by the that are made in this district. That is the climate action plan needs to be enforceable. These mitigation matters need to be enforceable and mandated through the whole jurisdiction. Second, you have to include not only S305 but also

scientific data. Scientific data and analysis that we need to meet those goals, not by 2050 but by 2035 or maybe even early. In fact there is no harm in doing that. And lastly, we missed out on economic benefits from doing this. There's been displayed that being a climate action planare going to costs our communities, and I don't think that is good at all. We've heard lots of testimony already that shows the economic benefits the climate action measures sooner rather than later. That could be part of this ... plan, not just the EIR as well. Lastly, I'm hoping that we can take some real leadership. The [key per] and the person that developed it came from San Diego. We should provide that kind of leadership in terms of coming up with a plan that is enforceable to reduce our greenhouse gas emissions much earlier than what the goals are. We should achieve that. Achieve great is not going to be [great] here. We need an A+. That means exceed the greenhouse gas reductions that are in place. That has to be mandated. That is something that is equitable for all of our communities. We don't need to need technological fixes like electric cars - we know what the technology is to reduce greenhouse gas emissions: walking and biking. It's real simple. We know from climate cases what works. We know that in the appendences of the transportation plan is the urban transit strategy. That should be analyzed and ... within this EIR. It's a very simple one and it's one that the National Corps Foundation has proposed a [5010] transit plan... transit development within the next 5 to 10 years. We could have a much better transit system with a urban corps. Already have a plan in place. That should be one ... within this EIR. At least study that. If you don't study this,decide if you need to. That's all within this EIR that's required of CEQA. Thank you.

CLOSING REMARKS:

This closes the public environmental scoping meeting for the **Climate Action Plan**. Your input will be transcribed, considered by City staff for use in the scope of the EIR, and included as part of the official record for the document. Speakers and commenter's will also be placed on the notification list for further environmental review actions related to this project.

I would also like to remind everyone that this is just the start of the environmental review process and opportunities for public input. There will be other opportunities to provide comment on the project, such as during public review of the draft environmental document and any public hearings.

Thank you for taking the time to participate in the meeting and have a great evening!

Make the following statement for the record if no members of the public show-up for the meeting within the first 30 minutes:

However, there is no one here at this time so we will wait 15 minutes and go from there.

It is currently _____ and no members from the public showed up tonight for the scoping meeting. So this will close the Public Environmental Scoping Meeting for the _____ project. The information provided from the City tonight will be considered in the scoping of the environmental document and included as part of the official record for the document. Thank you for taking your time to come out tonight and good evening.

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APPENDIX 8

Response to Comments – Supporting Materials

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Consciousness and Knowledge: Achieving Peace, Prosperity And Life-support Sustainability

An ELSI/Heartland Coalition Publication

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+ Luisa Levy -- English to Spanish Translation

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Cover picture Commentary

This is our home. Of all the planets we have found so far, ours is the only one with a life-support system. This system recycles the air we breathe, the water we drink and the food we eat. It also protects us from numerous rays, frequencies, fields, forces, etc. coming from space and considerable space debris.

Space debris is mostly burned up by friction with our planet's atmosphere. We see this as "shooting stars". The earth's magnetic field blocks or blunts various forms of cosmic radiation. If not for our planet's life-support system and earth's magnetic field, the Earth would be as lifeless as Mars appears to be.

Introduction

Please Share Worldwide!!!

www.jimbell.com

Hi, I'm Jim Bell,

Since these words are going out to the world, we probably haven't met until now. So whoever you are and wherever you live, it's nice to make your acquaintance.

I'm sending this out because I care.

I believe that when enough of us care about the well-being of our descendants and theirs, it will be easy to create world peace and bring everything we do for work or play into prosperity and life-support system harmony.

To share what I've discovered toward the above, I often use the San Diego/Tijuana Region, where I live, to show specific examples of how a particular region can become more life-support sustaining. The initial foundational focus for this region or any region is to become renewable energy, water and food self-sufficient. The more a region or even a country becomes self-sufficient in these essentials, the more it controls its economy and way of life.

The specifics of a region or country becoming renewable energy, water and food self-sufficient are dependent on its climate, renewable energy resources available locally and other particulars. Nevertheless, the principles behind making the San Diego/Tijuana Region sustainable can be applied worldwide.

My larger vision is that the economic, health and environmental benefits that the San Diego/Tijuana Region will gain by becoming renewable energy, water and food self-sufficient will be so positive, that the whole world will want to emulate them. The more this happens, the greater the chances that we can bring all human activities into life-support harmony.

Who will be first?

Whether or not the San Diego/Tijuana Region pioneers this effort, any region or country that does will take world leadership in the development and refinement of this vital new emerging industry; the industry of helping regions and countries around the world become sustainable, beginning with becoming renewable energy, water and food self-sufficient.

TELLING IT LIKE IT IS!!!

A Jim Bell & Common Sense Commentary

Sept. 2014 - Update

We humans are something special and rare.

Unlike any other species of life, we can choose to bring all human activities into peace, prosperity and life-support sustainability, or we can continue to damage our planet's life-support system until it fails.

Ultimately, choosing sustainability is about consciousness. If enough of us become conscious enough, it will be easy to create world peace and prosperity. It will be easy to leave our descendants a life-support sustaining world.

Unfortunately, at our present average level of consciousness, our quest to become more conscious will be cut short if we continue to live and make livings in ways that hurt others and cause life-support system harm.

This will result in a human and life in general dieback.* If serious enough, human extinction and even the extinction of life itself becomes a possibility.

*(A dieback is a drastic drop in the population of any particular species of life, or life in general, over a relatively short time period.)

Some people believe that a life-support failure has already begun. They offer evidence that:

+ As of mid-2012, an estimated 15%, or 1/6, of the world's population (more than one billion people) is malnourished or starving. Seventy percent of us (4.9 billion people) are unemployed or under-employed, have zero or next to zero access to healthcare and healthcare insurance, and are poorly nourished, clothed and housed.

+ Human activities are causing the extinction of an estimated 27,000 species of life each year. This corresponds to the rate of extinction around 65 million years ago when "the age of the dinosaurs" came to an end.

There are a number of theories as to its cause, but a consensus of extinction event scientists is leaning toward it being caused by an asteroid as large as 10 kilometers (6.2 miles) in diameter that struck the Yucatan Peninsula in Mexico around the same time.

Over the past 100 years and especially during the past 50 years, the rapid rate of species extinctions has been, and is still being caused by past and ongoing human assaults; assaults on each other as in war and its preparation and assaults on our planet's life-support system. It seems that the human family has become its own asteroid.

Human beings have generally been hard on our planet's life-support system. But prior to the 1800s, the world's population was still relatively small and the human capacity to change the earth was limited to what human and animal power could accomplish.

But with the industrial revolution came the development of powerful machines like bulldozers, steam shovels, tractors, trains and ships and cheap energy to run them. Through the use of these technologies, coupled with the use of dynamite, invented in 1867, the average negative impact on our planet's life-support system, per capita, greatly increased and is still increasing to this day.

Added to the still ongoing industrial revolution, came the chemical revolution. The soldiers of this revolution are chemists. Over the last 80 to 90 years, chemists have been paid to create an estimated 80,000 to 150,000 chemical compounds that never existed on our planet before chemists created them.

Many of these chemical compounds have been and continue to be added to our common planetary life-support system, our common environment, our common air, water and food.

We are now in the midst of biological, biochemical and electronic revolutions. Not surprisingly, these new revolutions are turning out to be just as damaging, and possibly more so, to human and life-support systems' health, than the industrial and chemical revolutions, established before them.

The result is that our bodies and our planet's life-support system are awash with chemical compounds that our bodies and life-support system have had zero experience responding to or processing. Since an estimated 1,000 new chemical compounds are being added to our common environment each year, we are breathing, drinking, eating, wearing, living in, etc., more human-created chemical compounds than ever before in history. This is especially hard on fetuses, infants and the young because they are exposed to these chemical compounds when they are most vulnerable to being harmed by them.

Not only is our average negative per capita impact on each other and our planet's life-support system still growing, the number of humans alive on our planet is growing as well. This growth is credited primarily to medical discoveries made by Louis Pasteur in the 1800s. Since Pasteur's discoveries, coupled with the general advance in prenatal, pediatric and medical care, the world's population has increased from less than a billion people in 1800 to 7.1 billion in 2013. If population growth continues as now, the world's population will grow to 8.1 billion people in 11 to 12 years.

But even with all the above given, the bottom line question for those who love their children and grandchildren, for those who feel connected to the human family's future, and for those who feel connected to the beauty, majesty and sustainable productive potential of our planet's life-support system, is:

What should we do to give our children and future generations their best chance to live in a prosperous, peaceful and life-support sustaining future?

On the most fundamental level, answering this question comes down to consciousness. If we, as individuals, and as part of the human family, become conscious enough, it will be easy to resolve human differences without violence or its threat; it will be easy to develop economies and ways of life that are beneficial to everyone and completely life-support sustaining.


Obviously, achieving the above is our task and challenge, but how can this be accomplished?


The answer is simple. We need to develop economies and ways of life that are peaceful, prosperous and life-support sustaining. Here's how:


Step One - Become renewable energy self-sufficient.

When a home, community, city, county, region, state or country becomes renewable energy self-sufficient, it controls its energy supply and price, its economy, its way of life and almost everything else we need or want -- no matter what happens to the price and supply of energy on national and global markets.


Renewable Energy Self-sufficiency in the San Diego/Tijuana Region – 2020

 The San Diego/Tijuana Region's land area is 8,522 sq. miles or 22,072 sq. kilometers. The region's estimated 2020 population is 6.8 million people

 Assuming that 6.8 million people live in the San Diego Tijuana Region in 2020 and there are 1,000 sq. ft. (92.5 sq. meters) of roof and parking lot per capita, there will be 244 sq. miles or 632 sq. kilometers of roofs and parking lots in the Region

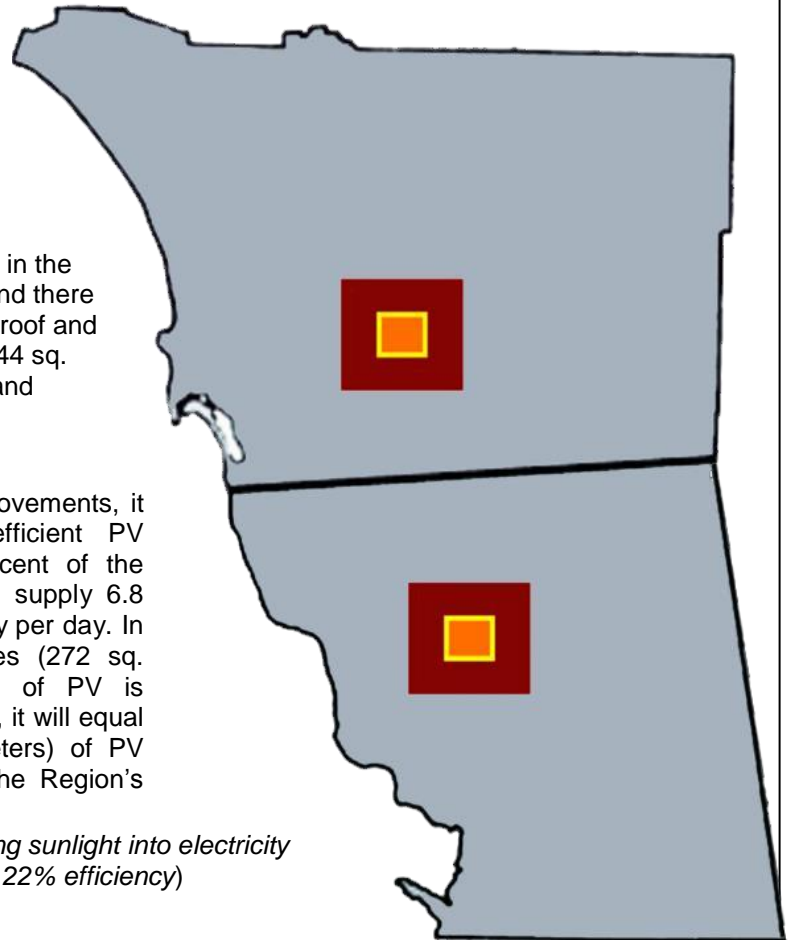
 With zero efficient energy use improvements, it would require installing 20%* efficient PV (photovoltaic) panels on 43% percent of the Region's roofs and parking lots to supply 6.8 million people with 40 kWh of energy per day. In 2020 this will equal 105 sq. miles (272 sq. kilometers). If the same amount of PV is installed on both sides of the border, it will equal 52.5 sq. miles or (136 sq. kilometers) of PV panels installed on each side of the Region's border.

**Twenty percent efficient at converting sunlight into electricity
(Commercial PV panels now exceed 22% efficiency)*

 By increasing energy use efficiency by an average of 40%, only 26% of the region's roofs and parking lots would need to be covered by 20% efficient PV panels to make the region renewable energy self-sufficient. In 2020, 26% coverage of the region's roofs and parking lots will equal 31.5 sq. miles on each side of the border.

ASSUMPTIONS:

- + Energy use per capita per day with zero energy use improvements ----- 40kWh per capita per day
(16 kWh electricity, 24 kWh equivalents, in liquid and gaseous fuels)
- + Energy use per capita per day with a 40% increase in energy use efficiency ----- 24kWh
- + Yearly average of productive sunlight per day in the San Diego/Tijuana Region ----- 5 hours



Additionally, solar energy in its various forms is free and even delivered free. The only cost to benefit from it are the labor and materials required to increase energy use efficiency and manufacture and install renewable energy collection devices to produce electricity, hot water, etc. Given that our inventors/developers are still getting better at saving energy and converting various forms of solar energy into

electricity, and other renewably generated fuels, the cost of efficiency improvements and renewably generated energy, will continue to fall.

To make renewable gaseous and liquid fuels, renewably generated electricity can be used to gasify or pyrolyze (heat up in a closed low oxygen chamber) clean wood wastes and landscape trimmings. In the San Diego/Tijuana Region where I live, the sustainable thinning of overgrown chaparral will contribute additional high energy materials for gasification. Thinning chaparral will also improve its habitat value for wildlife by opening it up for new plant growth. Additionally, thinning will reduce the severity and number of wildfires that occur in the Region today.

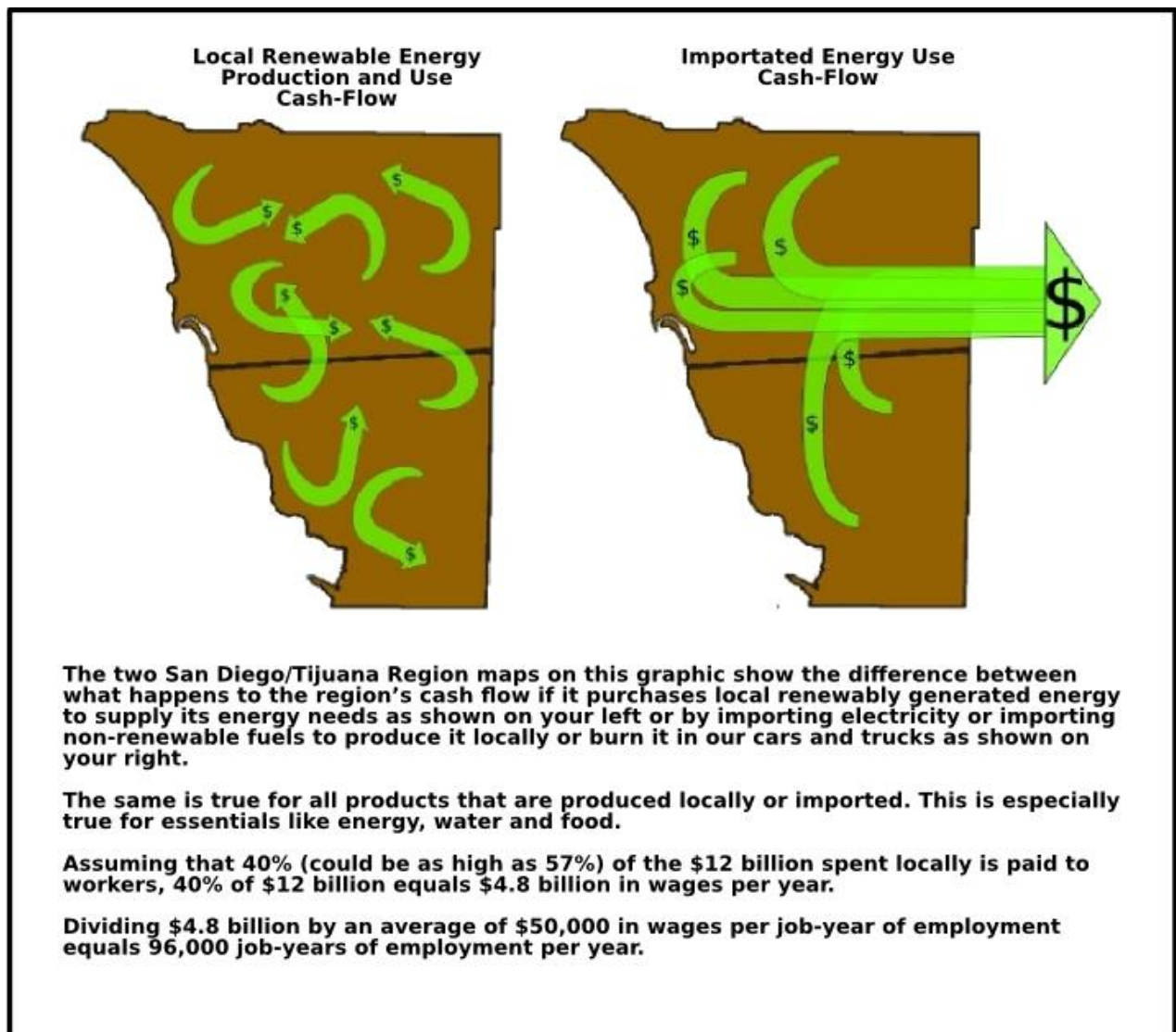
Once the gaseous and liquid fuels in the woody feed-stock are driven off, the mixture is distilled into renewably generated oil and liquid and gaseous fuels. Charcoal and soil amendments are the final products of the pyrolysis process.

Every level of becoming renewable energy self-sufficient creates opportunities. In the San Diego/Tijuana Region there is an abundance of direct sunlight, wind, biomass (plant and animal (including human) wastes), ocean currents, tidal differences, and waves. All these renewable energy sources can be used to make electricity and liquid and gaseous fuels.

But even if direct sunlight was the region's only renewable energy resource, it could become renewable energy self-sufficient by coupling a 40% increase in energy use efficiency and covering 26% of the region's roofs and parking lots with 20% efficient PV panels, (see previous graphics assumptions).

The most efficient commercially available PV panels to date are 22.5% efficient.

As a bonus, purchasing local renewably generated energy to supply the San Diego/Tijuana Region's energy needs will convert the region's current \$6 billion negative-energy-purchase-cash-flow, (to pay for energy imports), into a \$6 billion positive-energy-purchase-cash-flow. Assuming an economic multiplier benefit of, for every dollar spent on locally generated renewably energy, one additional dollar is spent in the region's local economy. This equals \$12 billion in local economic activity per year. Buying locally generated renewable energy will create \$12 billion of local economic activity per year, versus a \$6 billion cash-flow loss.



Step Two - Become renewable water self-sufficient.

Water is essential to life. It is essential to the water-rich lifestyle most people in the developed world already have and that people in the developing world would like to have. To make the math easy to understand, the following assumptions are used in the calculations that follow:

+ The population of the Greater Tijuana part of the region is more or less the same as the population of San Diego County, currently, 3,100,000 people.

If this is true, the San Diego/Tijuana Region has a population of 6,200,000.

+ Also assumed is that everyone in the Tijuana part of the region would like to use the same amount of water per capita as is used per capita in San Diego County, around 180 gallons per capita per day.

+ Given the assumptions above and assuming the worst case scenario of zero rainfall, zero recycled wastewater and zero imported water, can the San Diego/Tijuana Region become freshwater self-sufficient using renewably generated electricity to convert seawater into freshwater through reverse osmosis (RO)?

The answer is a resounding yes. Installing commercially available 20% efficient PV panels over 4% of the roofs and parking lots on either side of the San Diego/Tijuana Region, will produce 23,039,200 kWh of electricity per day or 11,519,600 kWh of electricity per day on each side of the region's border. Generating 23,039,200 kWh per day times 365 days per year equals 8,409,308,000 kWh per year. Multiplying 8,409,308,000 kWh per year times 65 gallons of freshwater per kWh of electricity consumed, equals 546,605,020,000 gallons of freshwater per year. Dividing 546,605,020,000 gallons by 7.48 gallons per cu. ft. equals 73,075,537,430 cu. ft. of water. Dividing 73,075,537,430 cu. ft. of water by 43,560 cu. ft. per acre foot equals 1,677,583 acre feet of water each year or 838,792 acre ft. of freshwater on each side of the border. (One acre ft. = 4,034 cu. meters.)

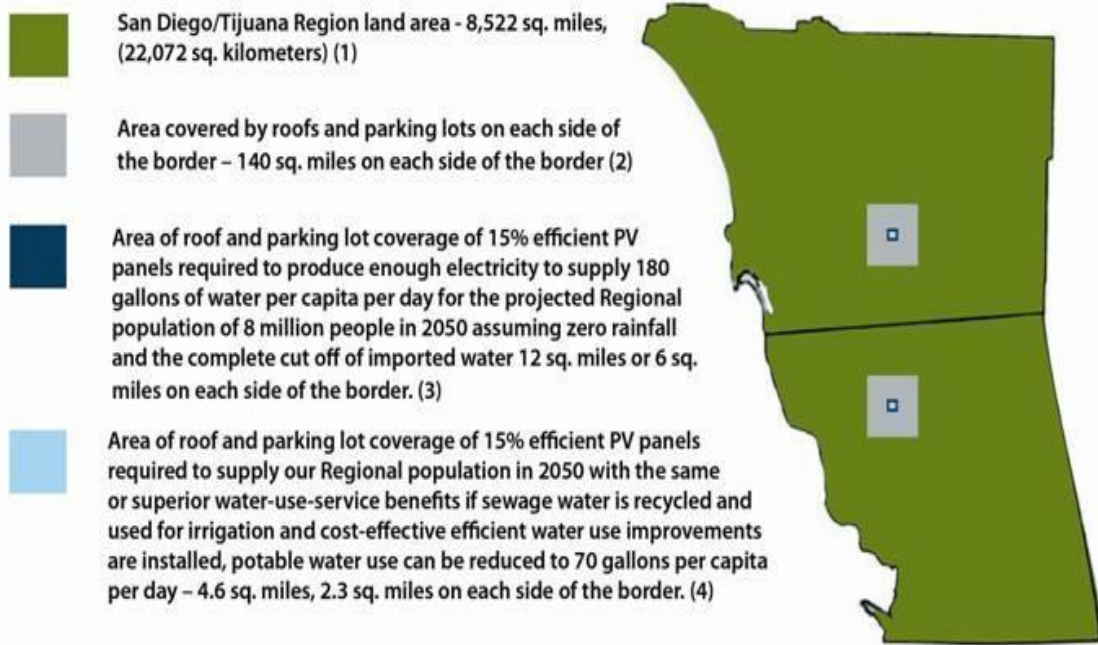
For reference, the San Diego County side of the region currently uses around 610,000 acre ft. of fresh water per year including county based agriculture.

If the region used cost-effective and life-support-system-effective ways to use water more efficiently, (low water use toilets, using graywater and disinfected recycled sewage water for irrigation, drip irrigation, collecting and storing rainwater runoff, etc.), only 1.5% of the roofs and parking lots in the region would need to be covered with 20% efficient PV panels to make the whole region completely renewable water self-sufficient.

To protect sea life from the RO process, sand filtered seawater will be extracted from wells close to the ocean. This way, eggs and small fish will be kept out of the RO process. Since the wastewater from the RO process will be twice as salty as seawater, it will be evaporated in shallow open ponds so salt and other minerals left behind can be mined. If any RO waste water needs to be returned to the ocean, it would be diluted by sand-filtered seawater to be no more than 20% saltier than natural seawater before being released into the ocean, diffusely.

WATER SELF-SUFFICIENCY IN THE SAN DIEGO/TIJUANA REGION 2050

Graphic prepared by: Jim Bell, Corine Maggio and Dustin Johnston

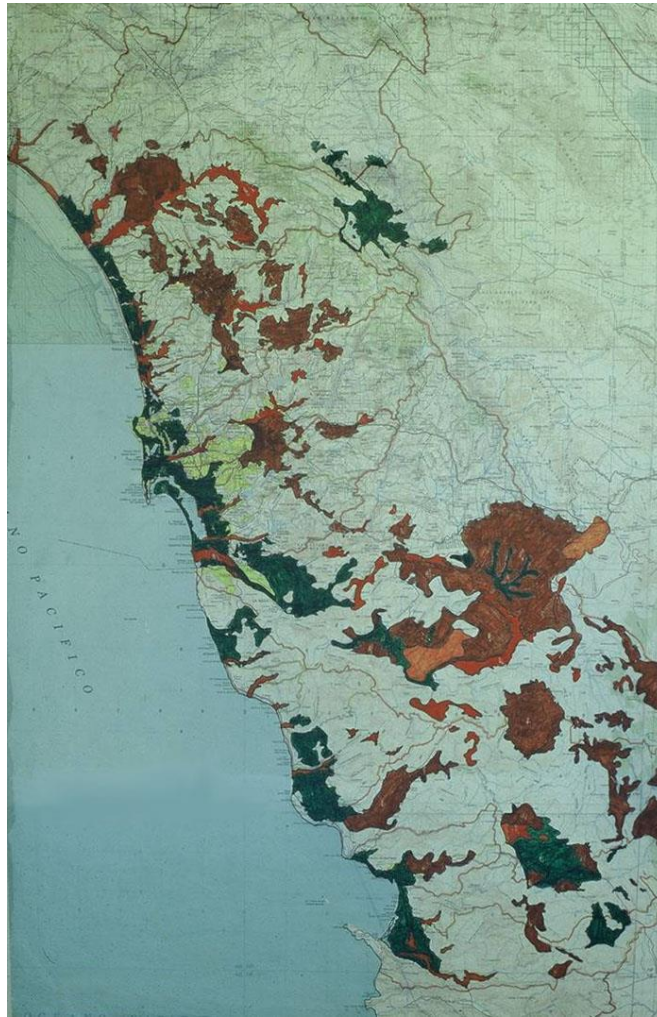


Step Three – Become renewable food self-sufficient.

With renewable energy and water self-sufficiency, comes the ability to be renewable food self-sufficient. It also allows for the growth of a great deal of fiber and lumber for local use and trading.

To make the San Diego/Tijuana Region and our planet permanently food self-sufficient, it is essential that we protect our agricultural soils from further development and other misuse. My research indicates that we still have enough agricultural soil in our region and on our planet to feed everyone a nutritious diet of tasty, sustainably-grown food with lots of variety.

Unfortunately, this will not be true for our region or world for long, if we do not protect and preserve our best agricultural soils for life-support sustaining agriculture and the sustainable production of wood and fiber.



There are 8 agricultural soil classifications in the San Diego/Tijuana Region. The map above only shows the region's 4 best agricultural soils, Red-1, Orange-2, Green-3, Brown-4. Knowing where your region's best agricultural soils are located comes under the heading of determining "where it's appropriate to do what." To develop a truly life-support sustaining future, we need to know about all the region's natural assets like local renewable energy, water and agricultural resources shown in the graphic. We also need to know its hazards like floodplains that flood and are subject to liquefaction during strong earthquakes like Mission Valley.

Step Four - Create a Real Free-Market Economy by Adopting "True-Cost Pricing" or "Cradle to Cradle Pricing".

Today, almost everything humans do causes human and life-support system harm. More precisely, it's not so much about what we do, but about HOW we are doing it.

The ways we support ourselves now depend on converting ever more renewable resources into nonrenewable and often, toxic trash, and in general, using renewable resources in ways that make them difficult to renew.

This begins by artificially reducing the cost of virgin materials versus using recycled materials by using our taxes to subsidize the harvesting and mining of them. The cost of virgin materials is further reduced by exempting material extractors from clean-up and repair after the extraction process is completed. The result is ravaged landscapes, overflowing landfills and ever more destruction of virgin land for raw materials to replace those we despoil and bury.

With true-cost-pricing or cradle-to-cradle pricing, the real cost of all products and services offered in the marketplace would be calculated by an independent unbiased body. This body would be charged with:

- + Determining the true-cost or cradle-to-cradle-cost of all marketplace offerings.
- + Calculating how much money should be added to each product's/service's retail price to cover paying for the health and life-support damage each product or service is causing or will eventually cause. This money will be held in reserve to pay for health and life-support system costs as they manifest. If products/services are ultimately determined to be human and life-support system benign, or even positive, no additional money would be added to their retail price.

Consumer Reports Magazine might be a good group to hire for this job. They carry zero product advertising in their magazine. They are also well known for their unbiased product/service/best value for its cost comparison studies. All they would need to add to their current analysis are human health costs and life-support damage costs.

Currently, the public pays these costs through taxes, health costs, property damage (acid rain), etc. In effect, the public is caught in the ironic position of actually subsidizing, with the taxes we pay, the very products and processes that are harming them, their property and their common life-support system.

Additionally, these subsidies retard the development and the commercialization of technologies that are more health and ecologically benign or even positive by artificially reducing the retail cost of ecological, health and socially damaging products and services.

With true-cost or cradle-to-cradle pricing, products and services with the lowest true and cradle-to-cradle cost would also have the lowest retail market price. As technologies become more ecologically sophisticated there is no reason for commonly used products to be any more expensive to purchase than they are now. In fact, in spite of the subsidies that health and life-support damaging products receive, the market price of some "Green" products is already lower than the harmful, often subsidized, products they replace. Most of them work better too.

Plus, it is always less expensive to prevent ecological, health and social problems than to fix them after they have been created.

Other true-cost/cradle to cradle pricing benefits include:

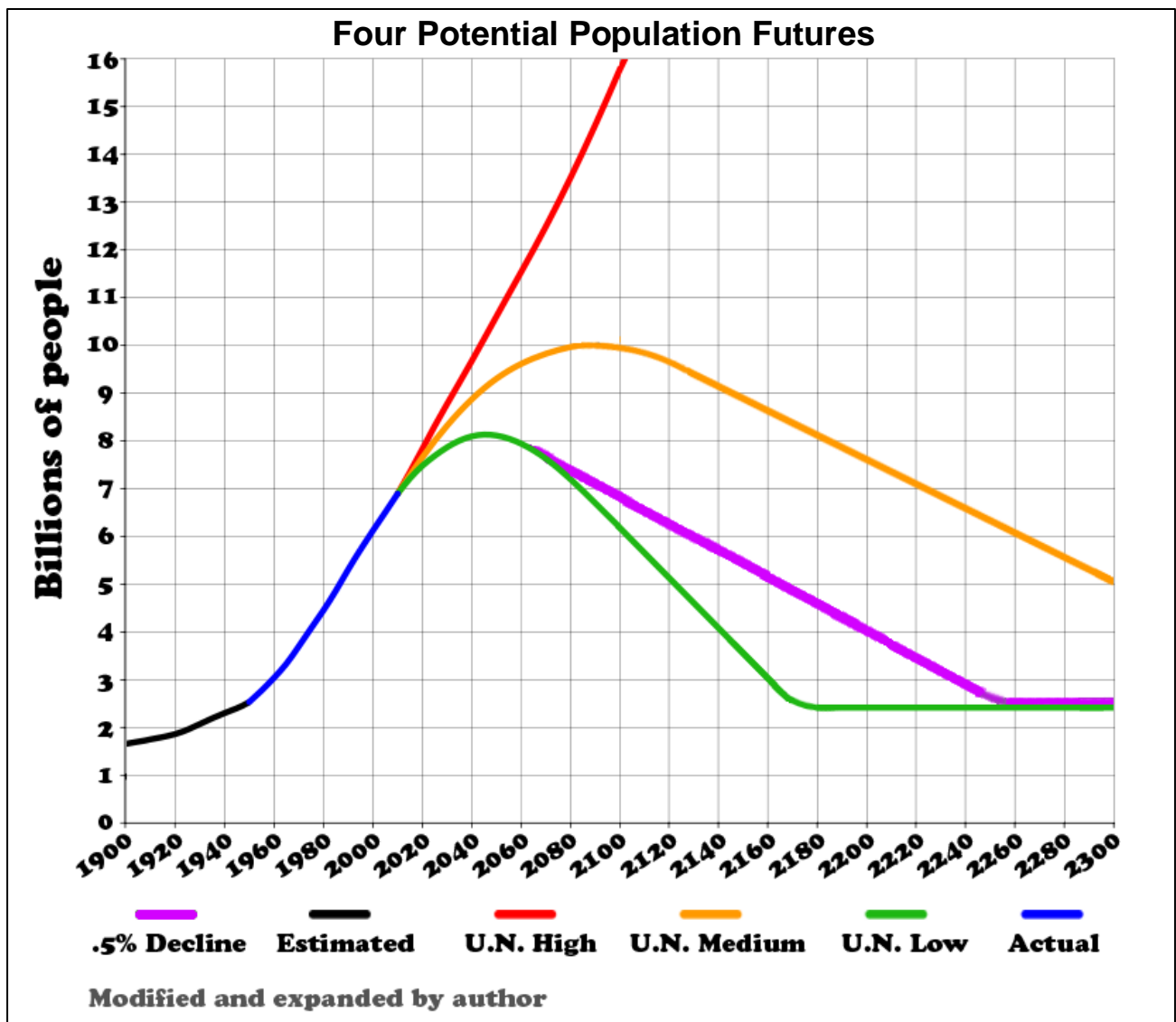
- + Incentivizing designers and manufacturers to create products and services that are in harmony with human and life-support system health.
- + The elimination of solid waste disposal. With true-cost-pricing or cradle to cradle pricing, everything sold in the marketplace would be designed to be reused, recycled or composted. When all costs are included, this is the most cost-effective thing to do.
- + The elimination of the pollution of the air we breathe, the water we drink and food we consume.
- + The more that people purchase locally produced items, especially essentials like energy, water and food, the more local jobs and business opportunities there will be.

There is a general view that the free enterprise system is the antithesis of a healthy environment. With true-cost/cradle to cradle pricing, free market forces will be powerful tools toward creating a more secure life-support sustaining future for everyone.

Step Five – Reduce Population

The only just way to reduce population is for:

- + Women to be completely free to direct their own lives and especially their sexual lives.
- + Every man becomes an ally to ensure that women have every freedom available to men to direct their own lives, culturally and under the law, and the right to pursue fulfillment in any field of endeavor open to the human family.
- + The world's women to freely choose to have an average of no more than two birth children during their reproductive lives. Since some women would choose to bear zero children and others only one, some women could bear three or more and still meet the average of two births per woman goal. If the average number of children born per woman was two worldwide, the world's population would decline by ½% per year. This would mean that for every 1,000 deaths, there would be only 995 births. A ½% rate of population decline (shown as violet on the graph) would reduce the world's population from 8.1 billion to around 2.7 billion people in 200 years. The world's population around 1960 was 2.7 billion. Even if, for every 1,000 deaths there are only 999 births, the world's population would decline, but at a much slower rate.



Step Six – Protecting the Human Family from Natural Threats

In addition to bringing the human family into human and life-support harmony, there are naturally occurring threats to human and life-support system health and wellbeing. Terrestrial threats include increased volcanic activity or a super-volcano eruption. Such occurrences have the potential to blast enough fine particles of dust and ash into earth's upper atmosphere to reduce or even preclude food production for one or several years. Since we haven't yet developed ways to eliminate such threats and since volcanic activity can occur without much warning, storing a secure supply of food, water, clothing, shelter and the like is vital to minimize the negative impact that volcanic activity can cause to the human family.

Until a few years ago, storing energy, water, food and other essentials was our only option toward preparing for the occasional collisions with earth-orbit-crossing space-objects large enough to cause significant human and life-support system trauma if they collide with earth.

But, space exploration has shown us that we already have the technology and know-how needed to locate all collision bound space objects large enough to cause serious human and life-support system damage if they collide with us.

We also have the technology and knowhow to alter their course enough to avoid such collisions if we discover them soon enough.

If we start in earnest to create a Space Debris Defense System (SDDS), in ten years, we'd be able to nudge collision bound space objects, as large as 500 to 1,000 meters in diameter, off their collision course with earth. As our SDDS capabilities grow, the courses of much larger space objects could be altered enough to avoided collisions with earth.

As a bonus, developing a SDDS will pay for itself by being able to capture desirable close-passing-space-objects into earth or moon orbits for scientific study and mining.

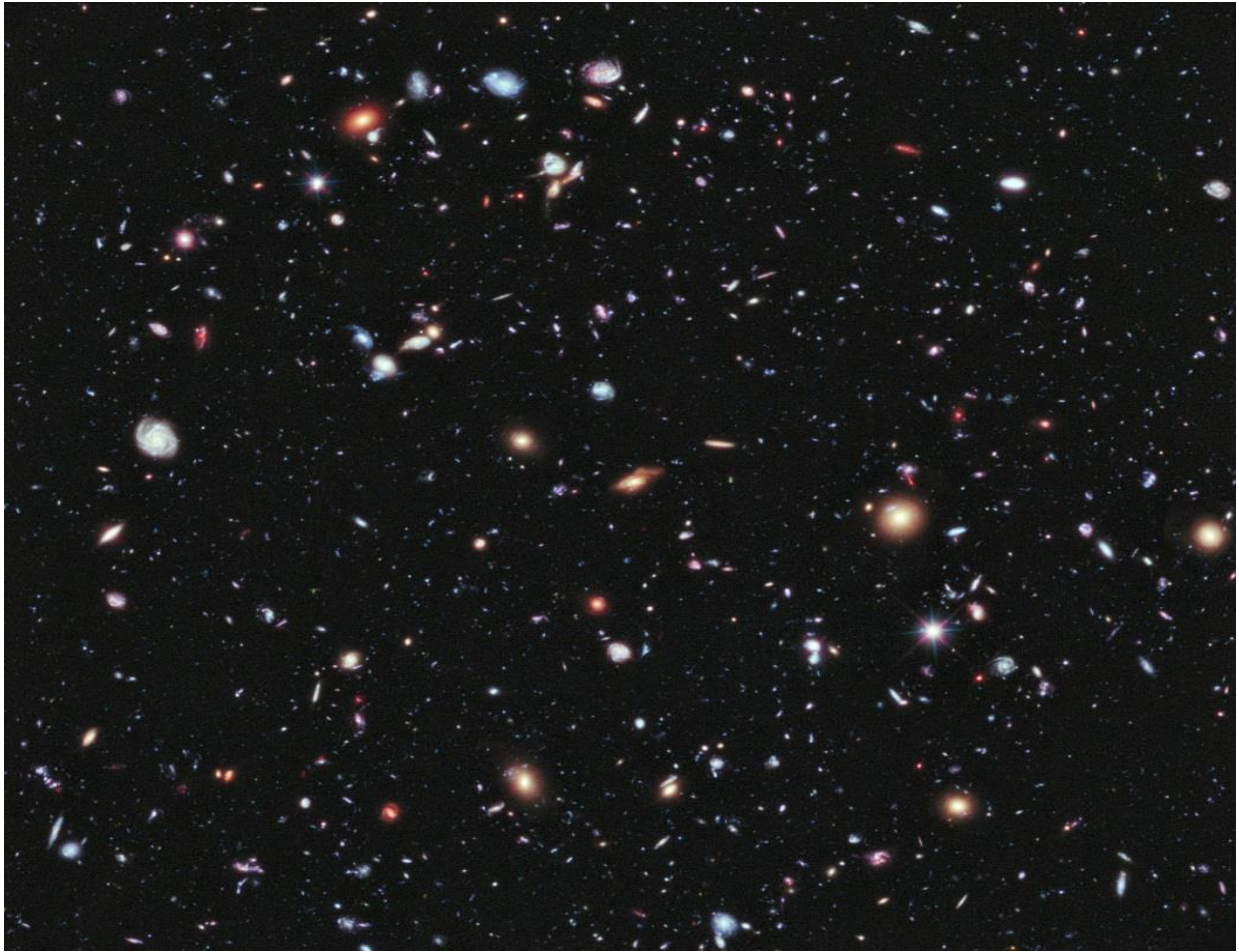
Final Thoughts:

Bottom line, if we want to leave the birthright of a happy, healthy, prosperous, life-supporting sustainable future to our children and future generations, these 6 steps and becoming more conscious are the minimum we must do, and the sooner the better.

We've come so far, why blow it now? We know what can be done. All we have to do is, do it. If those living over the next 60 years or so develop life- support sustaining economies and ways of life planet-wide, there is little to stop us from accomplishing anything we can imagine on this planet and beyond, including the eventual sustainable colonization of other planets in our own galaxy and in the universe beyond, starting with getting it right here first.

For details on an investment strategy to make the San Diego County side of the Region renewable energy, water and food self-sufficient, go to www.jimbell.com and click on "Green Papers". Although this paper focuses on electricity, the same strategy, with slight modifications, can be used to make the whole region renewable energy, water and food self-sufficient as well. The paper shows that even at 2005 prices and PV efficiencies of 10%, becoming renewable electricity self-sufficient in San Diego County, would add billions of dollars to its economy and create over 400,000 job-years of employment. Now, commercially available PV panels are twice as efficient as the 2007 paper assumes and are less expensive too. This strategy can work almost anywhere on our planet, modified for climate, renewable energy sources available and other local conditions.

To Support This Work, Send Donations to the:
Ecological Life Systems Inst. (ELSI),
4862 Voltaire St., San Diego, CA 92107-2108 or
call 619-758-9020 or visit jimbell.com for more
information.



Hubble Extreme Deep Field Photograph

This picture was taken from earth by pointing the Hubble Space Telescope at a small seemingly empty area of space. After 2 million seconds of exposure, empty space yielded the estimated 5,500 galaxies in the picture above. Some of these galaxies are calculated to be 90% as old as the universe itself.

This Deep Field Photograph shows that even if earth, our sun and solar system or even our own Milky Way galaxy disappeared from the universe, it wouldn't cause a ripple in the bigger scheme of things.

But, no matter how insignificant we may be, to our out credit, out of potentially billions of species of life that have already existed and gone extinct and an estimated 7.8 million species of life that are alive today, we are the only form of life that can understand the message written in this paper and act on it.

Will we? I don't know. I do know that we have the potential to do it. But if we don't do it soon, our chance to do it will be lost.



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The Mayor's Office

The Honorable Kevin Faulconer, Mayor of San Diego

Mike Hansen, Policy Advisor for Land Use and Environment

The Committee on the Environment of the City Council of the City of San Diego

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Councilmember Todd Gloria

Councilmember Chris Cate, Vice Chair

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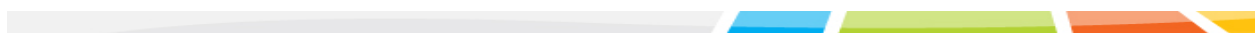
Cody Hooven, Sustainability Manager

Dear Mayor Faulconer, Environment Committee Members, and CAP City Staff Leads,

The Center for Sustainable Energy® (CSE; www.energycenter.org) appreciates the opportunity to submit comments in response to the March 2015 Draft of the City of San Diego Climate Action Plan. Headquartered in San Diego, CSE is a mission-driven nonprofit organization accelerating the adoption of clean and renewable energy technologies throughout California and across the country. For nearly twenty years, CSE has helped to create green jobs for San Diego residents and promoted local sustainable energy investments in partnership with the City, industry, utility and regional government partners.

CSE applauds Mayor Faulconer for championing a vision for San Diego to take action on climate change, grow the local economy, and enhance quality of life for all residents. As Program Administrator for half of a billion dollars of clean energy programs, including the California Solar Initiative and Clean Vehicle Rebate Program, we have seen our community step forward to adopt clean energy technologies at a rate that outpaces other cities in the state and across the country. San Diegans are proud of their city and are eager to make smart decisions to protect their environment and communities.

We provide the following comments to encourage the City to seize this opportunity and follow in the footsteps of California's bold and transformative energy policies, to become a national leader in climate



action by demonstrating its commitment to improving the efficiency of our buildings, create opportunities for local businesses, and offer pathways for residents to transition to clean energy technologies. We urge the Environment Committee and City staff to consider these additions in their upcoming review of the Climate Action Plan.

Energy and Water Efficient Buildings

Energy efficiency is our most cost-effective and plentiful energy resource at a cost of 2.8 cents per kilowatt hour compared to an estimated 7 cents for wind, 9.5 cents for solar, and 11 cents for coal.¹ Efficiency is also a necessary first step to achieving the 100% renewable energy goal described in Strategy 2. CSE applauds the City for its inclusion of residential and municipal building energy efficiency goals and looks forward to engaging in the stakeholder process to enact these measures.

Nevertheless, we believe the City can do more to prioritize energy efficiency, the most cost-effective carbon reduction strategy, in the Climate Action Plan. San Diego was recently ranked #27 out of the 51 largest U.S. cities for energy efficiency policy and programs², the lowest of any city in California and far behind San Francisco (4), Los Angeles (12), and San Jose (16). With this in mind, CSE encourages the City to adopt a goal to reduce nonresidential building energy consumption by 30% by 2035 and develop and implement a benchmarking and transparency ordinance.

Commercial and Multifamily Opportunities for Energy Efficiency

Energy use in buildings is the second largest source of greenhouse gas (GHG) emissions for San Diego after transportation. Commercial and multifamily buildings represent the largest energy usage in this sector and provide the greatest opportunities for cost-effective carbon savings. However, the current Draft Plan does not identify a commercial and multifamily building energy efficiency goal, action, or target. Energy efficiency in nonresidential buildings is foundational to a strong climate plan, and CSE urges the City to set a strong goal of at least a 30% reduction in energy use through efficiency by 2035.³

Benchmarking and Reporting Policy

Benchmarking and reporting energy and water consumption in buildings is a national best practice for improving energy management. Understanding energy use is the first step towards improving energy efficiency and ensuring that the City is on track to achieve the goals it sets forth in the Climate Action Plan. Benchmarking and reporting policies have been adopted by

¹ Maggie Molina, *The Best Value for America's Energy Dollar: A National Review of the Cost of Utility Energy Efficiency Programs*, American Council for an Energy Efficient Economy, 2014.

² American Council for an Energy Efficiency Economy, *The City Energy Efficiency Scorecard*, <http://database.aceee.org/city-scorecard-rank>.

³ Los Angeles has set a goal of a 30% energy use reduction through a benchmarking and transparency policy, audits, retrocommissioning, and expanding resources and outreach through the LA Better Buildings Challenge, <http://plan.lamayor.org/>, p. 32.

fourteen cities, as diverse as Seattle, Washington, D.C., San Francisco, Atlanta, and Boston; to encourage property owners to track energy use over time, help local governments understand their building stock, and measure progress toward greenhouse gas reduction targets.

Similar to mpg ratings, benchmarking helps building owners, managers, and occupants document their buildings' energy use, providing an apples-to-apples comparison of energy consumption to similar buildings using ENERGY STAR Portfolio Manager®, a free online measurement and tracking tool supported by the Environmental Protection Agency. Portfolio Manager is used by 40% of commercial buildings across the country and is also the statewide tool used for Assembly Bill (AB) 1103 compliance.

The City of San Diego's Ridgehaven Green Building was the first in the nation to qualify for the ENERGY STAR in 1999 and this success motivated the City to further its commitment to green building initiatives. Including a benchmarking and transparency ordinance in the Climate Action Plan is a logical next step to reduce costs and emissions and is in direct alignment with the City's established vision to increase the number of facilities brought up to ENERGY STAR performance levels.

Benchmarking data can provide a record of improved energy efficiency for building owners and operators as well as help in planning capital investments, such as efficient equipment upgrades, on-site generation, and energy storage systems. Benchmarking also creates opportunities for local jobs, and, as an example, New York City anticipates that 17,000 new jobs will be created by 2030 as a result of their local benchmarking and reporting policies.

When cities adopt benchmarking, they shine a light on the true state of affairs for energy and water use – and that can lead to cost-effective citywide energy reductions. In cities that have enacted benchmarking and disclosure policies, resource consumption has been reduced by 2%-7%. For example, Minneapolis has reported \$6 million in energy cost savings in just three years of benchmarking public buildings, and the District of Columbia has seen the number of ENERGY STAR certified buildings increase, moving it ahead of Los Angeles for the most ENERGY STAR buildings in the country.

CSE recommends the City include an action to develop and implement a benchmarking and transparency ordinance for large commercial and multifamily buildings in the final Climate Action Plan. With a commercial and multifamily benchmarking ordinance, San Diego can improve building energy and water efficiency, measure progress towards emissions reduction targets, help businesses cut their energy bills, and create local jobs. This cost-efficient strategy is encouraged by the California Energy Commission (Energy Commission) in its AB 758 *California Existing Building Energy Efficiency Action Plan*⁴ in advance of a statewide benchmarking

⁴ California Energy Commission, *California Existing Building Energy Efficiency Action Plan*, <http://www.energy.ca.gov/ab758/>, p. 44.

program anticipated in 2018. San Diego can help lead the State on these efforts, prepare its building owners, and apply for funding opportunities for this work through the AB 758 Local Government Challenge.

Clean and Renewable Energy

San Diego is a world leader in local solar installations, and it is fitting we set a goal of 100% renewable energy by 2035. This strong goal is the heart of the City's Climate Action Plan and sets it apart on the national stage for large cities across the country. CSE is confident that the City can meet this goal in a way that supports and grows the region's existing markets for distributed energy resources, including rooftop solar photovoltaics (PV), energy efficiency, demand response, and energy storage. As the Climate Action Plan moves into implementation, the City should prioritize strategies that ensure these local growth industries can flourish, thereby creating jobs, drawing new businesses to the region, and creating more clean energy opportunities for residents. Furthermore, ordinances that the City adopts towards the 100% renewable energy goal should support residents who have already adopted clean energy technologies.

Community Choice Aggregation (CCA), also called Community Choice Energy (CCE), has proven a successful strategy for providing customers with a choice in their energy supply and reducing utility bills for residents and businesses in Marin County, unincorporated Napa County, and the cities of Benicia, El Cerrito, Richmond, and San Pablo, which are served by Marin Clean Energy as well as those in the City of Lancaster served by Lancaster Choice Energy and Sonoma County served by Sonoma Clean Power. CSE applauds the Mayor for the inclusion of a citywide study on the feasibility of a CCA for San Diego in the Climate Action Plan and looks forward to this opportunity to engage in a broader conversation about energy choices for San Diegans.

We do contend, however, that the statement in the Note on page 35 of the Climate Action Plan, "...should the CCA Program or another program not be implemented, the City will explore the option of utilizing renewable energy credits (RECs) to contribute toward the 100% renewable energy target," is far too vague and open ended, perhaps enabling the use of out-of-state RECs to meet the City's goal of 100% renewable energy by 2035. Rather, we strongly urge the City's focus on local options to reach a 100% renewable energy target. Efforts should be local in nature to benefit local renewable energy businesses, create jobs, and increase resiliency for the city.

Whether through a CCA or not, the City should encourage its businesses and residents to secure solar energy resources from regional, i.e., "in basin", solar installations found on rooftops, carports, and ground-mounted systems which will provide significantly more local economic, job, and grid stability benefits than installations sourced through the State's Green Tariff Shared Renewables Program, which can come from out-of-state and out-of-country installations. Moreover, local, distributed renewable energy installations should continue to be fostered

through the use of Net Energy Metering, a proven mechanism for supporting customer investment in solar and a key component to the growth of San Diego's solar market. The City should also push for the expansion and use of Net Energy Metering in different ways. For example, in California, there are nuanced sub-tariffs that have expanded Net Energy Metering's benefit beyond one installation and one customer with tariffs such as Virtual Net Metering, Meter Aggregation, and Renewable Energy Self-Generation Bill Credit Transfer (RES-BCT). Expanding Net Energy Metering beyond artificial boundaries, such as the aforementioned Net Energy Metering sub-tariffs, can help San Diego cultivate true community solar initiatives that benefit San Diego's single and multi-family homeowners and renters, business owners, schools, and local government.

Bicycling, Walking, Transit and Land Use

Transportation accounts for 44% of San Diego regional greenhouse gas emissions and 54% of the City of San Diego's greenhouse gas emissions.^{5,6} Reducing emissions through a combination of reduced travel demand, alternative fuel vehicles, increased fuel efficiency, and improved vehicle operation practices is thus critical to meeting AB 32 emissions reduction goals for 2050. CSE appreciates the attention paid to multiple transportation and land use emissions sources in the Climate Action Plan and hopes to support these efforts as they are implemented.

In addition, CSE would like to offer several suggestions for the Climate Action Plan's multi-modal transit and land use goals. Regarding structure, the Climate Action Plan discusses municipal Zero Emission Vehicle (ZEV) deployment under Strategy 2 Action 2.1 and Strategy 3. CSE suggests that the Climate Action Plan present ZEV infrastructure and vehicle adoption in combination, because they compose an integrated transportation strategy.

Regarding Climate Action Plan transit content, California Executive Order B-16-2012, the ZEV Mandate, requires that the state have 1.5 million ZEVs on the road by 2025. This means the state only has ten years to add 1.4 million ZEVs and supporting infrastructure.⁷ Achieving this target will require strong local and regional support. Additionally, as the *California Transportation Plan 2040* indicates, to meet state goals, adoption of fleet-wide ZEVs, incorporation of Sustainable Community Strategies in transportation plans, and other initiatives including increased carpooling, commuter biking and walking, road pricing, and public transit,

⁵ Energy Policy Initiatives Center (EPIC), *San Diego County Updated Greenhouse Gas Inventory*, 2013, <http://catcher.sandiego.edu/items/usdlaw/EPIC-GHG-2013.pdf>.

⁶ Energy Policy Initiatives Center (EPIC), *San Diego County Updated Greenhouse Gas Inventory*, 2013 <http://catcher.sandiego.edu/items/usdlaw/EPIC-GHG-2013.pdf>.

⁷ Center for Sustainable Energy, *San Diego Regional Alternative Fuel Assessment*, 2015 <http://www.sdcleancities.org/wp-content/uploads/2014/10/DRAFT-REGIONAL-ASSESSMENT-4.16.15.pdf>.

will be necessary.⁸ San Diego is home to car2go, North America's first electric car sharing program. The City of San Diego has also recently signed on to the West Coast Electric Fleets initiative of the Pacific Coast Collaborative to evaluate the addition of ZEVs to its municipal fleet, and participates in the PEV Readiness Plan and Regional Electric Vehicle Infrastructure working group. These are proactive first steps to support the AB 32 2050 target and interim state targets. CSE encourages the City to accelerate these efforts and be a leader in intelligent transportation planning and promoting ZEV deployment.

Zero Emission Vehicle Adoption in the Municipal Fleet

To help the state meet ZEV targets, CSE suggests that the City look beyond the West Coast Electric Fleet's 10% municipal fleet goal and consider charting a path toward 100% municipal fleet ZEV adoption. This would allow the City to take preemptive and pioneering steps necessary to achieve state goals. The City might also consider updating Administrative Regulation 90.73 with stronger alternative fuel vehicle and ZEV requirements for publicly and privately owned vehicles, including all vehicle types and classes as technology becomes available. It should concurrently identify additional funding mechanisms to cover incremental costs. It could compare progress to the State of California via the Clean Vehicle Rebate Project and other alternative fuel vehicle program data. The City also sets a target for 100% conversion from diesel fuel used by municipal solid waste collection trucks to CNG or other alternative low-emission fuels by 2035. CSE recommends that the City expand goals for medium-duty vehicles in addition to municipal waste collection trucks, because a variety of technologies are already available for medium-duty vehicles. The City should further expand alternative fuel types beyond CNG, particularly to include natural gas. The City can utilize the San Diego Regional Alternative Fuel Coordinating Council (Refuel) and its ultimate readiness plan to guide next steps in initializing truck conversion.

Electric Vehicle Fueling Expansion

The City of San Diego is a state leader in alternative vehicle fueling stations. CSE also commends the City for its online permitting of EV charging stations and regional leadership of Technical Policy 11B-1 to address accessibility to EV charging stations. To expand upon the City's present efforts, CSE recommends that it add a streamlining mechanism for vehicle permitting to its Climate Action Plan. It could also adopt CALGreen voluntary codes to encourage new multifamily dwellings and commercial developments to include prewiring for Level 2 charging infrastructure. More visible charging stations will encourage consumers to adopt alternative fuel vehicles. The City might also consider adding a goal for working with electric vehicle car sharing services to reach underserved communities. These steps would ensure that San Diego continues to be a strong leader in the alternative fuels market while helping achieve state goals.

⁸ California Department of Transportation, *California Transportation Plan 2040*, 2015, <http://www.dot.ca.gov/hq/tpp/californiatransportationplan2040/>.

Policies to Reduce Vehicle Miles Traveled

The Climate Action Plan's Bicycling, Walking, Transit, and Land Use Strategy offers several strong goals to support reduced emissions. Transportation mode-shift policies provide the co-benefits of safety, affordability, equity, accessibility, and economic growth. Therefore, CSE encourages aggressive, near-term investment in transit, walking, and biking infrastructure.

The City should consider creating a goal for codifying a multi-modal, or "complete" streets policy. Research indicates complete streets increase safety, encourage walking and biking, and have a positive economic impact, while being affordable to implement.⁹ In prioritizing infrastructure projects, CSE also suggests the City consider environmental equity tools in addition to Transit Priority Areas.¹⁰ Transit-oriented development is especially effective when combined with affordable housing or placed in low-income communities. Low-income households tend to drive 25-30% fewer miles when living within a half mile of transit and 50% fewer miles when living within one-quarter mile of transit compared to those in non-transit-oriented developments.¹¹ According to TransForm, higher income households drive twice the miles and have twice the number of vehicles, on average, as extremely low income households living near frequent transit, so prioritizing transit-oriented development in low-income communities offers a greater marginal benefit for both emissions reductions and residents' access to transportation.¹²

The City might also create a goal of developing flexible parking codes such as parking development requirements "unbundled" from new building development to increase density and decrease vehicle miles traveled. Unbundling parking development from residential housing developments may decrease developer costs and encourage alternative transportation, without impacting neighborhood parking congestion as might be expected.¹³ Lastly, the City could consider a transit-first approach to development to avoid highway expansion, which increases induced vehicle miles traveled.¹⁴ This might include an expansion of car sharing or bike sharing services. Overall, the City's Climate Action Plan offers a variety of important steps to decrease GHG emissions via a comprehensive, multi-modal transit and land use approach. With the

⁹ Smart Growth America, *Safer Streets, Stronger Economies*, 2015,

<http://www.smartgrowthamerica.org/research/safer-streets-stronger-economies/>.

¹⁰ One such tool the City can reference is the California Office of Environmental Health Hazard Assessment, *CalEnviroScreen Version 2.0*, <http://www.oehha.ca.gov/ej/ces2.html>.

¹¹ TransformCa.org, *Why Creating and Preserving Affordable Homes Near Transit is a Highly Effective Climate Protection Strategy*, 2014, <http://www.transformca.org/transform-report/why-creating-and-preserving-affordable-homes-near-transit-highly-effective-climate>.

¹² TransformCa.org, 2014.

¹³ TransformCa.org, *Parking Database Challenges Residential Parking Requirements*, 2015, <http://www.transformca.org/news-article/parking-database-challenges-residential-parking-requirements>.

¹⁴ Handy, S. & Boarnet, M.G, *Impact of Highway Capacity and Inducted Travel on Passenger Use and Greenhouse Gas Emissions*, 2014, California Environmental Protection Agency Air Resources Board, http://www.arb.ca.gov/cc/sb375/policies/hwycapacity/highway_capacity_brief.pdf.

adoption of these additional elements, the City's plan would provide a greater reduction in emissions in alignment with the state's 2050 emissions reduction goals.

Conclusion

As San Diego sets out to achieve both economic growth and GHG emission reduction goals, all parties must work together to coordinate, develop, and enact sound energy policies. These policies and programs will continue to attract and retain businesses, create green jobs, and help local residents thrive—all while providing security and benefits for future generations of San Diegans.

Economic growth, cleaner air, and a more efficient, interconnected city structure are among the factors of why it is important the City passes a comprehensive Climate Action Plan with strong goals and support for cutting-edge clean energy measures and technologies.

San Diego is a vital player in the California economy and is a model city for sustainable growth and prosperity. Through this Climate Action Plan, the City has the opportunity to attract more investment dollars, continue to create clean energy jobs, and position itself as a national leader in clean energy policy that delivers real local economic benefits.

CSE looks forward to working with the City of San Diego to overcome challenges associated with a changing climate by implementing the tenets of this plan to ultimately best serve residents and businesses, keep the City economically booming and culturally vibrant, and continue to develop a clean energy future in America's finest city.

Kind Regards,



Jack Clark
Director of Programs
Center for Sustainable Energy
Board Member, San Diego Energy Advisory Board
Member, SANDAG Energy Working Group



Hanna Grene, LEED AP
Policy Manager, Energy Efficiency and Building Performance
Center for Sustainable Energy

CLIMATE CHANGE IS A CHILDREN'S ISSUE

Adopted by Convention Delegates May 2015

- WHEREAS,** There is broad scientific consensus that Earth's climate is warming at a unusual pace compared to natural changes in climate experienced in the past; and
- WHEREAS,** There is broad scientific consensus among climate scientists that human activities, contributing to greenhouse gases, are the dominant cause in climate warming; and
- WHEREAS,** Children represent a particularly vulnerable group already suffering disproportionately from both direct and indirect adverse health effects of climate change; and
- WHEREAS,** The greenhouse gases emitted into the atmosphere will accumulate over the coming decades and will profoundly impact today's children as adults and future generations; now therefore be it
- RESOLVED,** That the California State PTA urge its units, councils and districts to educate parents on the impact of climate change on children's health and future welfare; and be it further
- RESOLVED,** That the California State PTA, its units, councils and districts, urge school districts to educate students on climate and energy literacy and human sustainability; and be it further
- RESOLVED,** That the California State PTA, its units, councils and districts urge school districts to support programs and strategies to make schools more climate-safe and energy efficient models to prepare children for climate changes already underway; and be it further
- RESOLVED,** That the California State PTA, its unit, councils and districts urge school districts to serve as role models for practices that promote energy conservation, alternative energy sources, reducing dependency on automobile travel and encouraging sustainable practices; and be it further
- RESOLVED,** That the California State PTA consider climate change a children's issue and urge its units, councils and districts to advocate for comprehensive local, state and national legislation to substantially reduce man-made contributions to climate change and to mitigate its impact on children's health; and be it further
- RESOLVED,** That the California State PTA submit this resolution to the National PTA for consideration by the delegates at its convention.

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Continued on next page

BACKGROUND SUMMARY

According to thousands of peer-reviewed studies, the Earth's temperature is warming and the dominant reason is due to human activities. In California, climate change will cause more frequent and intense forest fires, more air pollution and deadly heat waves, a significant reduction in the snowpack and state water supplies, sea level rise and erosion along California's long coastline.

Today's children are already being impacted by climate change. Because of their physical, physiological, and cognitive vulnerability, children are more susceptible to adverse health effects from environmental hazards. As impacts of climate change worsen in the coming years, anticipated direct health consequences of climate change will include injury and death from extreme weather events and natural disasters, increases in climate-sensitive infectious diseases, increases in air pollution-related illness, and more heat-related, potentially fatal, illness. By rallying to protect and prepare our children today, we help the nation, the planet and future generations.

BOULEVARD PLANNING GROUP

P.O. Box 1272, BOULEVARD, CA 91905

July 15, 2015

TO: Mark Wardlaw, Director San Diego County Planning & Development Services & Phil Trom, Regional Plan Project Manager, SANDAG

FROM: Donna Tisdale, Chair, Boulevard Planning Group & as an individual; 619-766-4170;
tisdale.donna@gmail.com

VIA: mark.wardlaw@sdcounty.ca.gov & SDForward@sandag.org

RE: COMMENTS ON SANDAG'S SAN DIEGO FORWARD DRAFT REGIONAL PLAN & DRAFT EIR

At our regular meeting held on July 2nd, after reviewing issues, concerns, and options, the Boulevard Planning Group (BPG) voted unanimously (7-0-0) to authorize the Chair to submit comments on their behalf. The BPG is an elected community land use advisory group, located in fire-prone and groundwater dependent rural eastern San Diego County, under the jurisdiction of San Diego County. *County policy requires that our comments be sent to them directly and copied to non-County entities.*

These comments, focused on rural impacts and concerns, are limited in scale and scope due to a lack of time and other obligations.

According to conflicting and erroneous census summaries, Boulevard's population is somewhere between 319¹, 1,099², and 1,700³, with approximately 24 % of our population listed as American Indian. The Campo, Manzanita, and La Posta tribal communities are adjacent to the Boulevard Planning Area and our communities share the same resources and schools. A majority of our school children qualify for free meals. We believe our current predominantly low-income population is between 1,200 and 1,500.

We feel that SANDAG'S Regional Plan and key goals (Mobility Choices; Habitat and Open Space Preservation; Regional Economic Prosperity; Environmental Stewardship; Partnerships and Collaboration; and Healthy and Complete Communities) have not really been applied to our area. There seems to be a chronic bias towards urban areas, while shunting the harmful industrial scale projects into our sensitive and scenic rural areas, even though we all pay into the same system.

Our Group generally supports point-of-use generation and storage projects, with proper installation, filters, and clean inverters on new and existing homes, ranches, schools, Border Patrol facilities, tribal casinos, and similar participating facilities. We strongly oppose industrial scale projects that suck up millions of gallons of local sole-source drought-stressed potable groundwater resources, increase traffic on rural roads that were never designed for this type of heavy traffic/abuse, provide few to no local

¹ <http://www.california-demographics.com/boulevard-demographics#>

² <http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>

³ <http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>

jobs, alter our rural community character and quality of living, increase already significant fire risk and degrade property values, wildlife habitat, and public health and safety. We are unwilling hosts.

Main issues of concern include but not limited to the following:

- Limited backcountry outreach, taxation without representation, exploitation of drought - stressed sole-source groundwater resources, renewable energy conversion of rural neighborhoods, scenic and other natural resources and wildlife, disproportionate impacts to predominantly low-income communities, inadequate rural transportation funding.

Mega Region = exploitation of resources with little to no benefits for impacted communities:

- Boulevard and Jacumba are included in the Mega Region and are targeted for exploitation and conversion of our absentee-owned ranchlands, public lands, and open space, into a commercial industrial renewable energy / transmission sacrifice zone, where no such zoning exists.
- If allowed to proceed, the planned conversion would overwhelmingly benefit San Diego's urbanized areas at the expense of our fire-prone wildlands, drought-stressed groundwater resources, currently clean air quality, property values, rural and scenic character, wildlife, public health and safety, and rural quality of life.
- The addition of thousands of acres and hundreds of miles of fire-sparking and fire-fighting electrical obstacles increases already high insurance costs for our impacted residents.

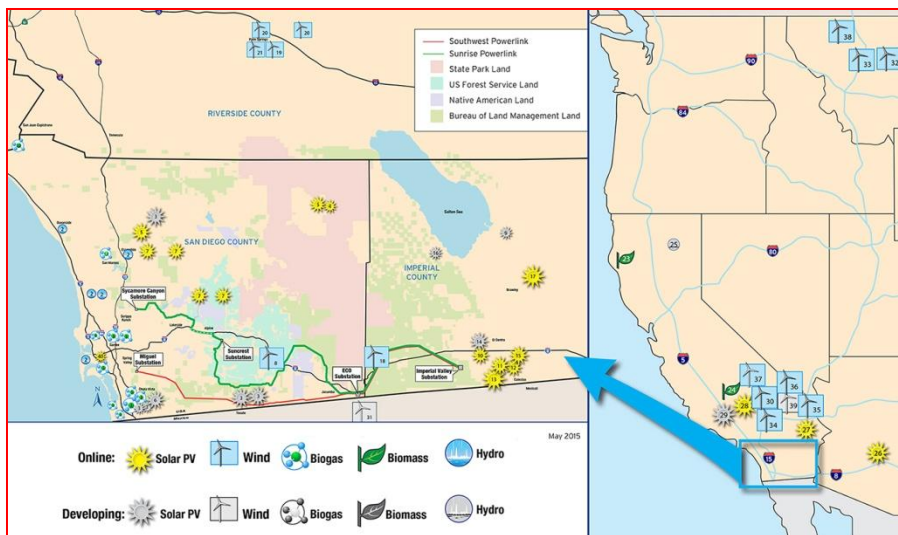
SANDAG's Regional Energy Planning⁴

- From our rural view, the Guiding Principles including Social Equity and Environmental Justice are merely empty catch phrases that have not resulted in additional or noticeable protections/benefits for the disproportionate impacts we have been, and continue to be, subjected to at the hands of SANDAG and other local entities, developers, and organizations.
- SANDAG should do what they can to prioritize, protect, and incentivize property owners and their rights to install point-of-use renewable energy generation and storage.
- The 2012 RES update is now outdated due to the rapid growth/spread of renewable energy⁵.
- SDG&E's current on-site DG / PV installation rate is much higher than expected.
- As of May 15, 2015, the San Diego Reader reported that SDG&E claimed a rate of 32% renewable energy including 369MW of rooftop solar, 59MW from 11 solar projects in San Diego County, and 789MW from 6 large-scale solar projects in Imperial County⁶. The article also includes SDG&E's map of projects (below), that show additional in-state and out-of-state energy project locations.
- SDG&E reports they will be compliant with 33% renewables mandate by the end of 2015.

⁴ http://www.sandag.org/uploads/projectid/projectid_374_18168.pdf

⁵ <http://www.energyalmanac.ca.gov/renewables/solar/index.php>

⁶ <http://www.voiceofsandiego.org/topics/science-environment/rooftop-solar-doesnt-help-sdge-with-clean-goals/>



- **@ page 64, Recommended Actions that raise concerns for our rural communities and for which no community outreach has taken place in the impacted areas, that we are aware of:**
 - **RE-1** (Identify potential locations in the region that could accommodate utility-scale renewable energy infrastructure).
 - Disproportionately impacted communities are usually the last to be informed—placing them in an unjust position of trying to catch up and undo what has already been done behind the scenes, with little to know transparency.
 - **RE-2** (Explore options to pre-permit zones of appropriate land for renewable energy development – renewable energy parks).
 - Developers often quietly approach legislators and decision makers, in an ex-party manner, to support changes that place outside interests over community interests, with no notice to those communities. Rural communities then have to belatedly scramble to find a way and funds defend themselves against often publicly funded projects and developers and biased decision makers.
 - **RE-3** (Identify existing barriers to siting large-scale renewable energy installations (e.g., renewable energy parks) in the San Diego region).
 - So-called barriers and freedom of speech are often our only defense against well-funded and politically connected crony capitalism and politically driven projects. Rural communities have rights, too, and deserve protection rather than concerted efforts by outsiders to alter long-fought community plans and zoning.
 - Mountain Empire Health/Collaborative was funded by SANDAG for rural community outreach that did not include any meetings in Boulevard or Jacumba. Campo is about an hour round-trip from Boulevard and longer from Jacumba.
 - While we appreciate the services they do provide for rural residents, on the issue of renewable energy projects and San Diego Forward, Mountain Empire Health/Collaborative has a conflict-of-interest because, despite major community opposition, they have accepted potentially quid-pro-quo money from several energy developers in exchange for supporting their projects, including Iberdrola (200MW Tule Wind), Soitec Solar (80 MW Rugged Solar, 60MW Tierra Del Sol Solar, 5MW LanWest

and 22MW LanEast), and the Hamann Companies who are absentee hosts to Soitec's Rugged Solar.

- We strongly oppose any Infrastructure Financing Districts or similar renewable energy overlay zones for our communities. Some recent IFD proposals did not even allow a vote by local residents/property owners. How equitable is that??
- Calling them renewable energy "parks" is a misnomer. At ground zero, they are ugly, noisy, water-sucking, dust, glare, and electrical-pollution-generating industrial energy zones enclosed by 6 foot chain link fences topped with barbed wire—converting fragrant chaparral, scenic pasture lands and high meadow habitat and blocking wildlife corridors.
- Commercial urban and suburban properties / warehouses with lots of flat roof space and lots of open parking lot spaces can and should be covered with PV parking shade covers. They make far better targets for so-called renewable energy parks, and don't require such extensive, expensive, and destructive transmission projects that generate a high guaranteed rate of return for monopoly utilities and increased rates for consumers.

Limited Public Transit Choices:

- Boulevard/Jacumba and other rural communities have very limited public transit options. Our communities are not even included on most of the maps.
- Senior & Disabled Transportation Services:
 - It is our understanding, through Mountain Empire Health, SANDAG currently provides about \$5,000 towards gas cards for people who are willing to transport disabled and seniors to town and back from rural east county.
 - Those grant funds are appreciated. However, drivers do not get paid anything for their time and they must have Red Cross training which limits participation.
 - SANDAG should consider providing and/or reinstating funds for a transport vehicle and drivers.
 - Rural tribally owned casinos offer an untapped potential win-win opportunity for additional rural transportation and park and ride options (GHG reductions) through sharing casino shuttle buses and parking resources/expenses for non-gaming public transit.
 - Outreach, details, and SANDAG or other funding options would need to be proposed, worked out with, and approved by, willing individual tribal governments/entities.

4.6 Water Supply⁷:

- Small rural water districts/companies and even tribal agencies sign controversial water sales agreements without full or fair disclosure to their shareholders / members; agreements often appear to violate bylaws, tribal rules and regulations, LAFCO spheres of influence, and grant restrictions.
- The federally designated Campo-Cottonwood Creek Sole Source Aquifer was left out:
http://www.epa.gov/safewater/sourcewater/pubs/qrg_ssamap_campocottonwood.pdf

⁷ <http://www.sdfoward.com/pdfs/EIR/EIRch4section16.pdf>

- The Campo-Cottonwood Creek Sole Source Aquifer boundaries include Mount Laguna, Pine Valley, Morena Village, Lake Morena, Campo, Cameron Corners, Potrero, Barrett Junction, Tecate US, most of the Cuyapaipe (Ewwiiaapaayp), Manzanita, La Posta, and Campo tribal lands, Live Oak Springs, all of the Boulevard Planning Area that lies west of the Tecate Divide, and portions of Guatay and Descanso.
- Live Oak Springs Water Company was left out of Table 4.16-1; this water company is currently in receivership. Unauthorized bulk water sales to San Diego Gas & Electric's ECO Substation project were curtailed by the CPUC in recent years, unauthorized water sales to construct the 30-acre3 Boulevard Border Patrol Station, and there was a County suit over water quality reports.
- Use of drought stressed groundwater resources for major regional energy and transportation projects must be halted. These projects can and should be required to use recycled water for construction.
- Close to 100 million gallons of water was needed for construction of SDG&E's \$435 million ECO Substation near Jacumba which will connect industrial wind and solar projects, in the US and Baja California Norte, to the Southwest Powerlink. The EIR originally estimated only 30 million gallons would be needed⁸.
- The source of the water was not included in the EIR/EIS, but was generated later in the Water Supply Plan, which denied the public's right to review and comment or challenge the controversial groundwater resources.
- Bulk potable water sales for SDG&E's project from the City of San Diego were increased approximately 60 million gallons.
- Over 1.15 million truck miles and related Green House Gas emissions were generated solely by hauling water to this groundwater dependent rural project site. How green is that??
- 15 million gallons of water was taken from the Campo reservation wells for the same project.
- Tribal members alleged they were not properly notified or allowed to vote on the sale of their precious water resources.
- The limited review included misleading and false information. Despite estimates that no impacts would occur, local springs, tribal and private off-site wells were negatively impacted, and did not fully recover, as predicted by reports, due to lack of adequate recharge (rain). Mature Oak trees were also impacted by reduced groundwater.
- The CPUC approved SDG&E's ECO Substation project but failed, as required in the mitigation plan, to monitor private wells within 1 mile of the Jacumba Community Service District wells that were the source for millions of gallons of water to the ECO Substation.
- Several well owners have complained that those water sales have impacted their wells but they have little to no recourse and have not vote if they are not part of the local water district.
- The CPUC is now the subject of numerous investigations, including criminal. They have abused, violated, lost the public trust.
- Currently, CalTrans has a project on I-8 in our area. We have received conflicting information on the source of water being used. One manager identified the source as the Jacumba Community Services District (JCSD). However, a JCSD ratepayer asked about the water sales and was informed that JCSD *was not* supplying groundwater to that project.
- The source of water should not be an unsolved mystery. It should be fully disclosed and vetted.

⁸ http://www.cpuc.ca.gov/environment/info/dudek/ECOSUB/MPR%2014_SDG&E_Request.pdf

- Use of reclaimed water must be prioritized and used before precious vanishing groundwater resources are taken from exploited low-income rural communities to support for-profit projects for absentee owners/developers that serve other communities.

WS-1B Use Reclaimed Water & WS-1C Ensure Adequate Water Supply @ page 4.16-26:

- We strongly support the required use of recycled water for construction sites and for concrete operations and real confirmation of adequate water supplies. Often times, the actual Will Serve forms reference the use of water if it is available at the time the project actually starts construction. They are generally vaguely worded and do not pass the smell test, and yet decision makers rely on them as valid proof that water will be available for a project.
- We strongly oppose manipulation and obfuscation of groundwater data and the suppression of the real world impacts these projects represent to those who rely on those groundwater resources, in order to support politically driven projects. It is neither equitable nor fair.
- We have seen this manipulation repeatedly for large-scale energy/transmission projects such as SDG&E's ECO Substation that estimated 30 million gallons but required closer to 100 million gallons.
- Similar water use underestimates were produced for the Soitec Solar projects planned for almost 1,200 acres on rural Boulevard—immediately adjacent to existing homes and small ranches all reliant on their private wells.
- Dudek originally failed to include significant water consuming project components for the Soitec's Rugged Solar project planned in Boulevard and were forced to revise their reports by over 30% or so when their omissions were caught by concerned residents.
- Dudek also erred on the groundwater resources available for Sunroad's Madera Golf Course in Poway that resulted in allegations that numerous non-participating wells were being drawn down⁹. Elected officials were then persuaded by Dudek to allow the golf course to continue pumping and the wells dropped significantly within 60 days. Dudek was proven wrong by real world impacts, and yet they keep getting hired to push whitewashed or greenwashed jobs through.

EIR/EIS section 4.

- Utility scale renewable wind, solar, and related electrical infrastructure projects are destroying /degrading the rural panoramic views, iconic landscapes, vanishing Mediterranean Mosaic / native habitat and wildlife corridors, overall aesthetics and visual resources viewed from multiple Eligible Scenic Highways in the transition areas (between the mountains and the desert floor) of Campo, Boulevard and Jacumba: I-8; Historic Route/Old Hwy 80; Hwy 94; Buckman Springs Road; Lake Morena Drive, and more.

Energy 4.5-1 @ page 1¹⁰:

⁹ <http://www.pomeradonews.com/news/2014/jan/27/low-water-level-forces-maderas-golf-club-to-shut/>

¹⁰ <http://www.sdfoward.com/pdfs/EIR/EIRch4section6.pdf>

This section needs to be updated to factor in the thousands of megawatts of new wind and solar that have already been approved and or/ installed in Southern California since 2010, and to include SDG&E's most recent claims of already reaching their 33% goal for renewable energy.

- The unnecessary targeting of rural low-income communities and conversion of carbon sequestering native vegetation and productive farmland into renewable energy zones must also be recognized and reversed.
- Point of use energy and storage systems should be recognized as the priority over large-scale rural projects that alter communities and resources.

4.6 & Table 4.6-2 @ page 4¹¹:

- **San Diego County's Climate Action Plan has been rejected by the courts and rescinded.**
- **Project list needs to be updated to include the following:**
 - Soitec's Lan West and Lan East projects were eliminated in the Final EIR for Soitec Solar; Soitec never followed through on Major Use Permits for either project.
 - Soitec's Tierra Del Sol Solar project was terminated by the company on March 4, 2014, after County approval, due to lack of buyers and the high cost of \$12 million or so for approximately 6 miles of new high voltage transmission line through highly flammable Boulevard residential areas.
 - SDG&E should have been aware of the termination, because by December 2014, they had already terminated all their PPA contracts for Soitec's four Boulevard projects.
 - The court recently set aside San Diego County approvals for Soitec's Rugged Solar and Tierra Del Sol Solar projects in Boulevard.
 - Invenergy's Desert Green project (developed by Soitec) began operation in December 2014¹² and is connected to SDG&E's Borrego Microgrid.
 - Construction of Imperial Energy Center West is well under way.
 - Energia Sierra Juarez (ESJ) Phase 1 is now operational and highly visible and intrusive, day and night, from the communities of Jacumba and Boulevard and for travelers on I-8 and Historic Route 80 that are both eligible as scenic routes.
 - An additional 1,000 MW expansion of the ESJ wind project is planned for construction on the almost 500,000 acres of ejido land in Baja California Norte under contract to Sempra or related entities. The energy is slated for export to California via SDG&E's ECO Substation.

Cumulative Impacts 5.0¹³:

- Utility scale wind and solar projects and related infrastructure / ENERGY SPRAWL must also be addressed, especially in the disproportionately impacted communities of Boulevard and Jacumba where absentee owners lease their lands to mostly foreign investors and companies at the expense of a wide variety of local resources, residents, visitors, and a struggling tourism based economy.

¹¹ <http://www.sdfoward.com/pdfs/EIR/EIRch4section6.pdf>

¹² <http://sdbj.com/news/2014/dec/09/desert-green-solar-farm-begins-commercial-operatio/>

¹³ <http://www.sdfoward.com/pdfs/EIR/EIRch5.pdf>

- Cumulative impacts include Climate Change with predictions of hotter and drier weather with reduced rainfall and groundwater resources along with increased fire risk for our rural communities.
- We have no access to imported or alternate water sources other than having water hauled in by truck at great expense.

Appendix A¹⁴:

- The planned Jacumba / Jacume Port of Entry is listed @ page 38
- The Desert Line project and \$1.82 billion in 2014 dollars @ page 38 seems to be a pie-in-the-sky project based on the current condition of the mostly original cross ties and tracks that are overgrown and filled or eroded in many places.
- Both are listed as Projects of interest to SANDAG; to be financed by other parties.
- If they ever come to fruition, both projects will impact our rural communities and resources, and will require a significant amount of water. Where will that water come from?
- Table A-5 @ page 47; Bicycle/Pedestrian improvements listed for I-8 on-off ramps @ a cost of \$500,000 to \$3 million each: I-8 @ Pine Valley, Buckman Springs, Kitchen Creek, Crestwood, Boulevard, Jacumba, In ko Pah
- Our communities would prefer to have those millions of dollars used for other local improvements that better serve residents. We rarely see bicycles on I-8 in our area, most use Hwy 94 and Historic Route 80.
- Boulevard does not even have a library or real community center, but we are still trying.

Appendix G: Green House Gas (GHG) inventory and projections¹⁵:

- Please take note of section 11 and the pie chart (Figure 2) on page 23
 - Chaparral and other vegetative cover do sequester carbon, along with undisturbed desert and high desert soils.
- GHG emissions are increased along with other air pollutants (inhalable dust and sand), and carbon sequestration is lost, when thousands of acres of native vegetation and undisturbed native soil crusts are disturbed for industrial scale renewable energy projects.
- GHG emissions are also increased with each mile/acre of new electrical infrastructure and large-scale energy storage systems, such as the 160 cargo containers of batteries on 7 acres approved in February by San Diego County with the 140MW of Soitec Solar CPV projects planned for Boulevard communities.
- Electrical pollution is also a source of air pollution generated by these massive energy projects that has a negative impact on public health and safety, wildlife, and livestock.
- Some of the related adverse health impacts of exposure to electrical pollution are documented in the science-based Bioinitiative Report¹⁶ and Dr. Samuel Milham's Dirty Electricity book and website¹⁷.

¹⁴ <http://www.sdfoward.com/pdfs/chaptersNPrintAppendices/DraftAppendixA-C.pdf>

¹⁵ <http://www.sdfoward.com/pdfs/DraftAppendixD-2012GHGInventoryForSDCountyAndProjections.pdf>

¹⁶ <http://www.bioinitiative.org/>

¹⁷ <http://sammilham.com/>

- Increasing wireless smart grid, appliances, and communications equipment has a dark side and adverse health impacts that are not recognized, considered, or addressed.
- Increased ground currents from massive electrical projects can also migrate off-site and into homes through plumbing and common neutral wires on the distribution system. See Ground Currents paper by Duane A. Dahlberg, Ph.D., of Electromagnetic Research Foundation, Inc.¹⁸
- Luckily for Boulevard, the Soitec CPV project approvals (80MW Rugged Solar; 60 MW Tierra Del Sol Solar) were recently set aside by the court. Soitec actually self-terminated their Tierra Del Sol CPV project in March due to a lack of buyers.
- **Section 12 Water:**
 - This section does not appear to include the significant amounts of energy consumed and GHG impacts for the potable water currently being pumped and /or transported for construction/operation of industrial scale renewable energy/ transmission projects in rural areas where no imported water is available.
 - Hundreds of millions of gallons of potable drinking water has been and will be trucked from the City of San Diego and other urban sources, and from potable groundwater extraction from both on-site wells and from very small rural water companies/districts with little to no disclosure or input from shareholders/rate payers.
 - San Diego Gas & Electric's \$435 million East County (ECO) Substation project used close to 100 million gallons of water that required over 1.15 million truck miles and GHG emissions to transport that water up to 140 miles roundtrip to site located east of Jacumba. The EIR erred significantly by originally estimating 30 million gallons would be needed.
 - It is unclear if the energy consumed by rural residents to pump their own groundwater in groundwater dependent areas that are not served by water companies or districts.

Appendix H Social Equity: Engagement and Analysis¹⁹:

- As of July 1st, Latinos are officially the new majority in California²⁰.
- How will this new majority impact the definition of MINORITY (endnote #2) and the Low-Income Minority data used in the Draft Regional Plan and DEIR?
- Predominantly low-income rural communities should qualify as "disadvantaged", regardless of their ethnic composition.
- Large scale energy /transmission projects, meant to serve urban/suburban San Diego, generate lots of heavy traffic, heavy equipment, and heavy water trucks that frequently exceed load limits on local roads and damage roadbeds on our limited number of paved roads, including the concrete bed of Historic Route 80 and Historic Route 94.
- Rural transportation issues/concerns are not readily evident in the Regional Plan or DEIR.
- Mountain Empire Health/Collaborative did hold several meetings but none were held in Boulevard or Jacumba, according to the write up @ page 67, which includes several spelling errors.
- **We do support the Highest Priorities listed on page 67:**

¹⁸ http://www.buergerwelle.de/assets/files/ground_currents_links_to_cancer.pdf?cultureKey=

¹⁹ <http://www.sdfoward.com/pdfs/DraftAppendixH-SocialEquityEngagementAndAnalysis.pdf>

²⁰ <http://sanfrancisco.cbslocal.com/2015/07/08/its-official-latino-are-the-majority-in-california/>

- Seniors and our region's youth are most impacted by the lack of mobility.
- Lack of transportation connectivity further impacts the health conditions of our region's population.
- Limited transportation options coupled with limited access to food is a challenge.
- Limited access to technology does not allow our region to be informed on para-transit programs.
- *Reopening the volunteer driver reimbursement program.*

Appendix U9 Regional Energy Strategy²¹:

- **Renewable Energy @ page 4**

- The County's 2013-2015 Strategic Energy Plan²² appears to focus on streamlining small scale wind and solar and point-of-use generation—*not industrial scale projects*.
- The County's Climate Action Plan has been rescinded after court losses.
- The County's Comprehensive Renewable Energy Plan has apparently stalled with the next meeting date for the Phase One report expected to be in the fall of 2015.
- The County's Wind Energy Ordinance has unresolved CEQA litigation in the Court of Appeals.
- Iberdrola's 200MW Tule Wind project was approved in 2012 for approximately 13,000 acres (abutting the Boulevard Planning Area) but has not yet started construction; they have no Power Purchase Agreement and no Eagle Take Permit; they also requested a 2-year extension for BLM's Notice To Proceed. BLM granted a one-year extension to December 2015, saying a 2-year extension may not be in the public interest.
- Invenergy's lease with the Campo Kumeyaay Nation for the 160MW Shu'luuk Wind and solar project (abutting Boulevard Planning Area) was terminated after the tribe voted it down due to inadequate lease payments and health concerns.
- Enel Green Power's 90-150 MW Jewel Valley Wind and solar project in Boulevard was withdrawn after the Wind Energy Ordinance was approved to include low-frequency noise limits and restriction of new wind energy projects to the Wind Resource Area in the NE section of Boulevard near the Tule Wind project in McCain Valley (McCain Valley National Cooperative Land and Wildlife Management Area and McCain Valley Recreation Area).
- SDG&E withdrew their 57 MW Manzanita Wind project after failing to secure site control from the Manzanita Band of Kumeyaay Nation whose members have complained of adverse health and well being impacts generated by noise and electrical pollution generated by the existing 50MW Kumeyaay Wind turbines located on Campo tribal lands next door.

- **Progress since Regional Energy Strategy adoption @ page 6:**

- San Diego County has made significant progress on reducing energy/water use at their facilities and meeting LEED standards on new construction.

²¹ <http://www.sdfoward.com/pdfs/DraftAppendixU9-RegionalEnergyStrategyAndRegionalEnergyStrategyGoalsSummaryForTheSDRegion.pdf>

²² http://www.sandiegocounty.gov/reusable_components/images/dgs/Documents/Energy_StrategicEnergyPlan.pdf

- SDG&E's Borrego Microgrid²³ project, which has been around since 2010²⁴, should be added to UCSD microgrid resource listed.
- **4.4.1 Greenhouse Gas Emissions in the San Diego Region & Table 4-2:**
 - It is unclear if the Green House Gas (GHG) Emissions are included for Sempra's Costa Azul LNG import facility, located in the San Diego area, just south of the border.
 - Sempra is transitioning Costa Azul into an export facility.
 - The Costa Azul facility shares San Diego's air basin and within the MEGA REGION.
 - The cooling and heating process required to convert natural gas to and from Liquefied Natural Gas (LNG) is highly energy intensive and should be counted for local emissions.
 - LNG is also transported via diesel run ships and those transportation emissions must also be counted.

5.2 Renewable Energy & 5.2.2²⁵

- Intermittent wind and solar projects cannot and should not be compared to base load energy that can generally provide energy 24/7 for decades.
- Wind and solar projects have unproven track records for longevity with some thin film PV projects already having to replace faulty panels.
- The plan's comparison of the cost of renewable energy to base load gas-fired power does not include the cost of load-following backup generation or energy storage which can significantly increase the costs of renewable.
- Congress has yet to extend multiple lucrative incentives (PTC-ITC) that artificially reduce the price of wind and solar through billions in tax payer dollars. If not extended, or if the incentives are extended at reduced rates, the cost of renewable energy will increase accordingly.
- The plan does not appear to address the significant and historic drop in natural gas prices, related to increased domestic production through fracking.
- The drop in natural gas prices has triggered Sempra's rush to export cheap gas through multiple LNG facilities that are being converted from import to export facilities. That means the gas will still be burned for fuel somewhere, while local energy costs rise to support renewables.
- The cost of renewable energy also appears to neglect the cost of concrete, the mining of silica sand, rare earth, steel and other materials required for wind and solar components, and the GHG emissions generated for manufacturing and transporting those materials, for the planned transition from fossil fuels.
- The cost of SDG&E's \$1.9 billion Sunrise Powerlink, \$465 million East County (ECO) Substation east of Jacumba, and other multi-million projects must be included in the cost of renewables, including the disproportionate and unreimbursed costs to impacted communities and resources.

Thank you for your consideration of these limited comments.

Any errors or omissions are unintentional...

²³ <http://www.utilitydive.com/news/sdge-microgrid-uses-solar-storage-to-avoid-outage-in-small-town/400147/>

²⁴ <http://energy.gov/sites/prod/files/SG%202010%20Peer%20Review%20-%20Borrego%20Springs%20Microgrid%20-%20Tom%20Bialek%20SDG%26E.pdf>

²⁵ http://www.sandag.org/uploads/projectid/projectid_374_18168.pdf

COLAB's public comments to Imperial County's Draft Programmatic Environmental Impact report, Imperial County Renewable Energy and Transmission Element Update

We thank the Imperial County's Planning and Development Department, the Imperial County Planning Commission and the County Supervisors for their efforts to establish an update to the Master Plan to include the Renewable Energy and Transmission Element component. COLAB is certainly supportive of economic development, growth in the business community and employment for our residents. We find many of the areas in the proposed plan sufficient to meet the known issues surrounding the emerging renewable energy development.

Over the last several months, we have met with staff to express concerns and are pleased that most have been address. We ask today that you provide direction on the following comments and requests for changes to the plan.

1. **Reclamation bonding** for the solar projects appears inadequate and is not inflation-protected. We are additionally concerned that the reclamation bonding company may no longer be in business at the time it is needed, twenty or thirty years from now. Reclamation bonding as it exists for current projects is simply another lengthy, expensive lawsuit. A potential solution is to require the public utility or industry owned utility that purchases the power to be contractually bound to perform all reclamation duties in the event the renewable energy entity does not. This alleviates the burden on the county and the taxpayers. The public utility or industry owned utility that is also in a much better position to obtain reclamation bonds to ensure that no claim will be made against the public utility or industry owned utility that, provided the public utility or industry owned utility that remains jointly and severally liable for all reclamation duties. Imperial County must not rely on the developer or a bonding company for reclamation." In many cases the renewable energy company's projects will be a single-asset Delaware LLC with no other assets. The landowner, the county and hence the taxpayer will be unable to collect anything from that legal entity. We are not asking the power company to provide a "guaranty". That would be difficult to enforce.
2. A **Letter of Credit** should not be considered acceptable for reclamation bonding. It is simply too easy for a letter of credit it be cancelled. This is advice from our financial members. We believe that, under your direction, this is a more secure requirement to the bonding.
3. The current reclamation plans for solar development are undervalued, with one exception. The average cost per acre in May was only \$3935. Additionally reclamation bonding requirements record keeping appears lax, and needs to be strengthen with a public report generated each year. We are pleased that staff has *reviewed the reclamation plans and have agreed with us. We understand that letters to all solar companies that have developed farms and those who are in progress have been issued a letter that the reclamation plans need to be redone to include the removal of materials (not included in the cost) and that resell of the materials should not be included in the cost analysis. Once the new reclamation plan is approved, a new value will be required. The plan, prior to acceptance, need to specify that the cost of removals be included and that the cost of resell of materials be excluded from the calculation.*

4. We request that all CUP's require that the public utility or industry owned utility that be jointly and severally liable for the reclamation cost of the project, to the same extent as the developer. This should also be required by County Ordinance to provide the County and the taxpayer with the authority to preclude the energy companies from walking away from the project, which may be a hazardous waste site, permanently poisoned and the land never again farmable. The public utility company is in a better position to enforce the contract provisions with the developer than the landowner or the County.
5. Another county ordinance should preclude the use of chemicals that are permanent soil sterilizers as a weed control effort. The impact to the soil and its surrounding area can never be repaired. Any application of chemicals on solar farms should be permitted just as they are on agricultural lands. We understand that rather than a new ordinance, the Ag, *the Ag Commissioner will now include language in the Pest Management Plan to preclude permanent soil sterilizers on any site that may be returned to agricultural use. We ask that you provide that direction to accomplish this.*
6. The county should set a standard for solar panels to preclude the use of any toxic material. Like the permanent soil sterilizers the use of toxic materials cannot be reversed. Like the concern for the exposed playa at the Salton Sea, the spread of these toxic substances could be significant to surrounding area, especially those with crops—and children. This component in the Air Quality mitigation and relative to toxic fumes from toxic materials in the solar panels should be strengthened. It also needs to be addressed for Hazards and Hazardous Material and Hydrology and Water Quality sections to include a component the potential for toxic material in the solar panels. It is our understanding that this is agreeable and we ask that you provide direction to make this change to preclude known hazardous materials and that should a material be reclassified as hazardous, appropriate remediation will be required.
7. We also find the second option for Prime Farmland (AG-1A) inadequate and it be amended to be to 1.5 ratio of the fair market value. After all the intent is to allow the development on the edge of the farmable land, not on it. This preserves the right of the landowners, and while providing incentives to the developer to seek all viable options prior to considering prime farmland. While the plan pushes renewable energy projects to the fringes of the agricultural land—prime and non-prime, additional measures on the reclamation requirements are needed. We do not see this as unreasonable. It is the same requirement used by Kern County.
8. By all accounts, the employment projections for the recently approved solar projects were overstated. Additional due diligence by staff, the planning commission, and ultimately Board of Directors must be added as a component of the plan.

Thank you again. We believe that with the inclusion of these modifications, Imperial County will have a valuable tool for the future development of renewable energy here.

EXHIBIT A

October 1, 2012

Anna McPherson
City of San Diego Development Services Center
1222 First Avenue, MS 501
San Diego, CA 92101

Via Electronic Mail
Dsdeas@sandiego.gov

**Re: City of San Diego Climate Mitigation and Adaptation Plan (CMAP)
Comments on Draft Negative Declaration and CMAP**

Dear Ms. McPherson:

Please accept the following comments on behalf of Coastal Environmental Rights Foundation (CERF). CERF is a nonprofit environmental organization founded by surfers in North San Diego County and active throughout California's coastal communities. CERF was established to aggressively advocate, including through litigation, for the protection and enhancement of coastal natural resources and the quality of life for coastal residents.

CERF supports the City of San Diego ("City")'s efforts to prepare a Climate Mitigation and Adaptation Plan to address the significant impact continued greenhouse gas (GHG) emissions and climate change will have on our environment, locally and globally. While CERF applauds the City for its efforts, the CMAP simply does not go far enough, and certainly does not establish a threshold below which contribution to greenhouse gas emissions will not be cumulatively considerable.

As detailed below, in order to truly reduce GHG emissions and make the necessary reductions, the City must be more aggressive in its approach. Further, in order to qualify as a California Environmental Quality Act (CEQA) tiering document, the City must meet the mandates of CEQA Guideline section 15183.5. The CMAP does not meet these standards.

I. The CMAP Reduction Goals Are Too Weak

The City purportedly relies on the CARB Climate Change Scoping Plan directive for local agencies to develop a CMAP target that tracks the statewide target. (CMAP, p.2-1). The *Climate Change Scoping Plan*, Pursuant to AB 32, The California Global Warming Solutions Act of 2006 (Scoping Plan) specifically states:

"Therefore, California State government has established a target of reducing its greenhouse gas emissions by a *minimum* of 30 percent below its estimated business-as-usual emissions by 2020 – *approximately a 15 percent* reduction from current levels." (Scoping Plan, p. 24, emphasis added).

In addition to tracking emissions using these protocols, ARB encourages local governments to adopt a reduction goal for municipal operations emissions and *move toward establishing similar goals for community emissions that parallel the State commitment* to reduce greenhouse gas emissions by approximately 15 percent from current levels by 2020. (*Id.*, p. 27, emphasis added).

Notably, the Scoping Plan qualifies the 15 percent reduction from current levels as an estimate to substitute for a 30 percent reduction below BAU emissions in 2020 and is a *minimum* target. Moreover, the local government plans are meant to parallel the State commitment – not take advantage of it. Thus, the City has short-changed the CMAP process in the following ways: (1)



setting the goal as a minimum 15 percent reduction from current levels; and (2) taking credit for state and federal measures in the local CMAP.

In setting the goal at the minimum target (or slightly above), the City has left itself no margin of error. If any of the implementation measures do not work as expected, or any of the other CMAP modeling assumptions do not prove to be accurate¹, the City will have left to work even more aggressively in the future to “catch up”. The City must develop a CMAP with a margin of safety built in to the reduction target to account for future unexpected increases or modeling/calculation errors.

In addition, though the Scoping Plan provides a local target of 15 percent below baseline, this number was adapted from the statewide target: 30 percent below business as usual (BAU) in 2020. (Scoping Plan, p. 24). The City chooses not to use the 30 percent below BAU target (which would be a lower target) and simultaneously takes credit for state and federal implementation measures that should be part of the BAU. As a result, 59 percent of the City’s reduction “measures” come from implementation of state and federal policies for which there is “no additional local action”. (CMAP, p. 4-7).

Thus, the City is not committing to reduce GHG emissions by 15 percent below baseline or 30 percent below BAU. Rather, the City proposes to reduce 2020 BAU emissions by *12 percent*.² Available guidance indicates the local governments should not take advantage of statewide fuel emission standards and RPS reductions in developing local plans.³ In order for local plans to work in parallel with the state, as suggested in the CARB Scoping Plan, the City cannot rely on the state or federal measures over which it has no control.

II. The CMAP Water Efficiency Measures Will Not Increase Conservation

The CMAP and Negative Declaration (Neg. Dec.) qualify water use efficiency improvements as an energy-reduction measure. The stated goal of water use efficiency is reducing daily per capita water consumption to achieve the SB7X goal of 142 daily gallons per capita by 2020 and 116 daily gallons per capita by 2035. (CMAP, p. ES-3, p. 4-2, Table 4-3). According to the City’s 2010 Urban Water Management Plan (UWMP), the City has already achieved this target – so no additional energy savings will result from baseline conditions. (2010 UWMP, pp. 3-6 to 3-10 [reflecting 2010 annual daily per capita water use was 127 gallons per capita per day]).⁴

The City should also be aware that current CEQA documentation and water supply assessments being circulated for various projects paint a different water supply picture than

¹ Indeed, the City’s baseline (an average of 2004, 2007-2009) from which to calculate reductions could have been compared to the actual 1990 emissions (for which the City apparently did conduct an inventory) for a cross-reference. (Negative Declaration, p. 6). EPIC’s San Diego County GHG Inventory estimates Countywide emissions went up 18 percent from 1990. (EPIC San Diego County GHG Inventory Executive Summary, p. 3). If this holds true for the City, a 15 percent reduction in “baseline” emissions will surely fail to get us to 1990 levels in 2020.

² BAU with federal and state strategies beyond 2020 is 12,254,548. The target is 10,754,790. This is a 12 percent reduction from BAU.

³ See Local Government Operations Protocol For the quantification and reporting of greenhouse gas emissions inventories Version 1.1 May 2010, pp. 23-26 (scopes and double-counting); see also, Climate Action Planning: <http://www.coolcalifornia.org/article/step-3-develop-a-climate-action-plan> (reflecting lack of reductions allocated to state or federal level measures)

⁴ It should also be pointed out that the City’s 2020 goal in the UWMP is particularly lax as the City chose one of four options to calculate the SBX7 goal. (2010 UWMP, p. 3-10). The second available method would have set the target at 133 gpcd. (*Id.* at p. 3-8).



assumed in the CMAP. For example, the City's Environmental Impact Report (EIR) for the Shawnee/Riverbend project set for City Council review and approval on October 2, 2012 a Water Supply Assessment (WSA) contained in Appendix K. The WSA states:

The utilization of 116 gallons per person per day is the City's acceptable standard for single-family water consumption (including landscaping) and 80 gallons per person per day for multi-family water use (includes landscaping)...⁵

In response to the EIR and supporting WSA, CERF submitted comments questioning the reliability of the 116 and 80 gpcd figures. The City has remained steadfast in relying on this water usage assumption for an almost 1000-unit proposed project.⁶ (See FEIR Response to Comments p. RTC-15). Thus, the City's CEQA baseline is either incorrect for the CMAP (meaning no energy reduction will be realized because water conservation targets have already been met) or for the Shawnee/Riverbend project will use more water than anticipated (meaning the City will not have enough supply to meet the water supply needs of the new project, and will have to find new sources).

Before the City claims conservation as an energy reduction measure, it must accurately and transparently quantify its current and future anticipated water supply. Until this is done, the City must assume its water efficiency measures will not only fail to result in energy reduction, but will likely incentivize water waste because of the embarrassingly low UWMP and SBX7 targets set by the City. To that end, CERF suggest the City set the following real energy efficiency reduction goals:

- 1) Develop a water supply loading order that rates energy-intensive options such as desal as a supply of last resort;
- 2) Set a SBX7 goal of 86 gallons per capita per day, following the example of Sydney, Australia⁷ (with a similar climate)

III. The City's Must Prepare an EIR To Evaluate Project Alternatives

The City's CEQA problems are two-fold: (1) the currently proposed CMAP is supported by a Neg Dec, which claims no significant environmental impacts will result from the project; and (2) the CMAP is meant to be used as a tiering document for future CEQA climate change cumulative impacts analysis pursuant to CEQA Guideline section 15183.5. (CMAP, pp. 2-2, 2-6, 2-7; Neg Dec p.1).

Although a CMAP is meant to serve as a qualified GHG reduction plan under CEQA Guideline section 15183.5, it fails to meet the applicable requirements. In doing so, the CMAP also ensures GHG emissions will continue to increase because projects which rely on the CMAP will not prepare project-specific GHG analysis or mitigate GHG impacts on a project-specific level. (Neg. Dec., p. 1). In that regard, the Neg Dec provides that adoption and implementation of the CMAP would not generate GHG emissions that may have a significant impact on the environment, but instead would reduce GHG emissions over the baseline business-as-usual condition. (Neg Dec, p.

⁵ WSA, p. 4, Table 3-1

⁶ Specifically, part of the City's response was: "In addition, typical usage has for quite a while been 14 HCF, and can be seen referenced in many documents such as proposed water service rates and charges. In general, the number was identified some time ago and has not been updated. With the current conservation efforts and other factors, the actual water usage has been going down." (FEIR, p. RTC-15).

⁷

<http://www.cityofsydney.nsw.gov.au/environment/water/currentstatus/waterconservation/waterdemand.asp>



26). However, by implementing the CMAP, the City would actually be foreclosing meaningful project-specific analysis. Because the monitoring and inventory specifics have yet to be articulated (and many years may pass before they are developed), the City may approve numerous projects and fail to analyze the project-specific GHG impacts. (CMAP, pp. 6-1-6-2). As a result, these projects will be approved without adequate alternatives analysis or mitigation measures. Further, without specific and enforceable implementation measures, the CMAP cannot be relied upon to establish a threshold below which the contribution to GHG emissions would not be cumulatively considerable. (CEQA Guideline Section 15183.5(b)(1)(B)).

Further, the City only has a reduction target for 2020. In the interim, local GHG emissions will continue to contribute to climate change. As pointed out in the Sierra Club letter, the City will be contributing to overall GHG emissions each year until 2020, and those GHGs remain in the atmosphere for decades to 100 years. Thus, without annual, interim benchmarks and targets, the City will be exacerbating climate change until 2020 (and likely beyond since the 2020 target is not aggressive enough).

IV. Conclusion

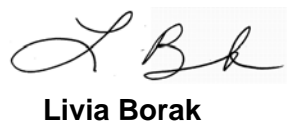
Unless the City implements a more aggressive target for GHG emission reductions and relies on *local* measures to reduce emissions, it will not be in compliance with the local AB 32 directive. Further, if the City relies upon the CMAP for future project-specific analysis, significant impacts to GHG emissions will result. CERF urges the City to consider its role in reducing GHG emissions as the local entity with land-use authority. The City should more seriously consider implementing the General Plan policies by urging SANDAG (and using its voting power at SANDAG) to develop a Regional Transportation Plan (RTP) that prioritizes public transit instead of freeway widening. As evidenced by the current litigation against SANDAG, the RTP itself, and the metrics set in the RTP are woefully inadequate. As a leader in the region, the City can do better. CERF urges the City to comply with AB 32 and with CEQA, and go back to the drawing board.

Thank you in advance for your consideration of our comments.

Sincerely,

COASTAL ENVIRONMENTAL RIGHTS FOUNDATION


Marco A. Gonzalez


Livia Borak





San Diego Chapter
8304 Clairemont Mesa Blvd., Ste 101
San Diego, CA 92111
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858-569-6005

September 28, 2012

Linda Giannelli Pratt
Chief Program Manager
City of San Diego Environmental Services Department
Email: LPratt@sandiego.gov
Anna McPherson, Environmental Planner, City of San Diego Development Services
Center, 1222 First Avenue, MS 501, San Diego, CA 92101
E-mail: DSDEAS@sandiego.gov

Via E-mail, to the two emails shown above

Subject: Comments Regarding

1. San Diego's Draft Climate Mitigation and Adaptation Plan (C-MAP)
2. The Negative Declaration document for the C-MAP

Dear Ms. Pratt and Ms. McPherson:

I appreciate the opportunity to communicate with you concerning this important topic. As the Chair of the Chapter's Transportation Committee, I will primarily restrict my comments to climate and climate mandates on regional and city-wide transportation. With the help of chapter-energy-policy expert Bill Powers, I will offer comments on energy.

Introduction

Understanding the relationship between global warming and transportation requires the use of mathematics. Therefore, it is useful to give you a summary of my professional experience. I have a BSEE degree and a Masters of Science, Engineering (MSE) degree. I worked for 36 years at Lockheed Martin, in Sunnyvale. For the last 20 years there, I worked as a satellite-systems engineer. One of my responsibilities was to develop equations and methods to measure and then compensate out, through satellite database upload, the misalignments of the key antennas on the MILSTAR communication satellite.

My responsibility is to speak for the Chapter on regional and local transportation matters. Therefore, I have spoken many times before the SANDAG Board of Directors on the topics of Climate and Transportation, where he I often stated:

1. Above all else, SANDAG must adopt an RTP that will ensure that SANDAG does its part to stabilize the climate at a livable level.
2. This means at least achieving the reductions specified in the Governor's Executive Order S-3-05.
3. The SB 375 target, for year 2035, which CARB gave to SANDAG, as just 13%, would instead have to be 35.1%, in order to support the S-3-05 trajectory.

4. The above result is so important that SANDAG needs to evaluate its validity, by reviewing the mathematics shown in Reference 2 (Sierra Club to SANDAG, April 20, 2011, *California Air Resources Board (CARB) Greenhouse Gas (GHG) Reduction Targets, Issued to SANDAG, in Accordance with SB 375, for the Year 2035*) and reporting back its findings.
5. The money allocated to freeway expansion, including Managed Lanes, should be reallocated to build and operate transit.
6. “Smart”, as in “smart growth”, needs to be defined as “VMT-reducing” so “smart growth” means “VMT-reducing growth”; therefore “smart” strategies and developments could be evaluated and ranked on a VMT-reduction-per-dollar-spent, basis.
7. Likewise, expenditures on bicycle transportation strategies should be evaluated and ranked on a VMT-reduction-per-dollar-spent basis.
8. When SANDAG draft reports are placed on line for public comments, all of the public submittals, that are of reasonable length and that are submitted in an acceptable format, should be placed on line for the general public, the media, and the Board to view.
9. Unbundling the cost of parking and driving is technologically feasible; is much more equitable than most current systems, which make it artificially cheap to drive and park; and is a strategy which would significantly reduce driving, congestion, air pollution, and greenhouse gas (GHG) emissions. It would give people more choice over how to spend their own money.

The SANDAG Board has never responded in any way to any of these suggestions, requests, and facts. This is disappointing. I do not think this represents the interests of the City of San Diego. The Board majority seems unable to keep up with changing circumstances and it seems out of touch with emerging technologies. The Board majority needs outside help, a fresh start, and a new direction. San Diego controls 40% of the 100 weighted votes. SANDAG can take no action without approval of the weighted vote.

Please note that Item 8 above applies to the comments you receive on your draft C-MAP, such as this one.

Conclusion That the C-MAP Requires an EIR Process Under CEQA

As shown on Page 2 of

[http://docs.sandiego.gov/citybulletin_publicnotices/CEQA/PN1300%2520Climate%2520Mitigation%2520and%2520Adaptation%2520Plan%2520\(CMAP\)%2520Draft%2520ND%252008%25202012.pdf](http://docs.sandiego.gov/citybulletin_publicnotices/CEQA/PN1300%2520Climate%2520Mitigation%2520and%2520Adaptation%2520Plan%2520(CMAP)%2520Draft%2520ND%252008%25202012.pdf), the C-MAP will serve as a qualified GHG reduction plan (GHGRP) under CEQA guidelines. It must quantify and establish a level, based on substantial evidence, below which the GHG emissions from activities covered by the plan would not be cumulatively considerable. The level needs to be established that supports (does its part proportionately) climate stabilization because destabilizing levels are certainly cumulatively considerable. As shown in Reference 1, the proxy for stabilization is the Executive Order S-3-05 (“S-3-05”) trajectory, recognizing that what is important is the area under the two straight lines connecting the 3 points of S-3-05. This is shown in Figure 1¹. This means that if any years have emissions about the straight lines, there will need to be enough years *below* the straight lines to

¹ From http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf, *California's Scoping Plan*. The 1990 level is from Page 21. The 2000 level could not be found so it was estimated to be 3% below the average for the years 2002 to 2004, taken from Page 14 of *California's Scoping Plan*.

compensate for the amount of GHG emitted that was over the limit. The 3 points are 2000 levels by year 2010, 1990 levels by 2020, and 80% below 1990 levels by 2050. The last two of these points mean that 40% below 1990 levels by year 2035 is acceptable. This will not be achievable without significant policy change. Yet the outcome of achieving this trajectory is poor and no rational human being, let alone an environmentalist, would wish that outcome on our planet. However, the outcome gives us a chance to avoid destabilization (which would equate to a collapse of our population, to include the possibility of extinction). So while achieving the S-3-05 trajectory is a bad outcome, not achieving it is so bad as to be unacceptable. We must at least achieve S-3-05. Note that a similar plot could be constructed for the world. However the world emissions are not below the 2000 values. In fact, in 2010 the world broke all records for emissions. 2011 world emissions exceeded the 2010 levels. These records were set, in spite of a world recession. San Diego's job in formulating this C-MAP is, in part, to understand and to support the science and mathematics of stabilization. Supporting stabilization means the adoption of enforceable policies that will achieve the reductions required. This will set an example for other cities, the state, other states, and other countries.

Your work to date fails to explain the science and mathematics of climate stabilization. To its credit, it shows what may be the reductions necessary for San Diego to support climate stabilization from 2020 to 2035, relying on the 2008 CARB Scoping Plan's request for cities to achieve a 2020 emission level that is "15% below current levels". However, the C-MAP fails to have a plan to achieve the needed reductions. In fact, as shown in Section 4.1 of this letter, the reductions "expected" (your word on Page 4.2) total 6,762,879, although what must be achieved is 11,033,225 (units are MT CO₂e). Therefore, this plan is setting an example of failure to stabilize the climate. The reduction, that you only "expect", is not even close to what is needed. Therefore the negative outcome of doing this plan, in its current form, is to contribute greatly to climate destabilization. This is hardly an acceptable or insignificant outcome. Therefore your conclusion that no EIR is required under CEQA law for adopting the current CAP is incorrect. Decision makers need to understand that this C-MAP, in its proposed form will contribute significantly to climate destabilization, as a cumulative impact, with other cities that adopt GHGRPs that fail to meet the targets needed to support climate stabilization. Furthermore, there are many feasible mitigation strategies that you fail to recognize. For example, it would be feasible for the city to amend its off-street parking ordinances to require the unbundling of the cost of car parking. This would increase fairness and economic choice while it would reduce driving. However, even though you posted a report that explains this strategy, <http://www.sandiego.gov/environmental-services/pdf/sustainable/parkingcosts.pdf>, you ignored it, in violation of CEQA law requiring your full consideration of feasible mitigations.

From the above-identified "pdf" file comes the key requirement:

Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions levels.

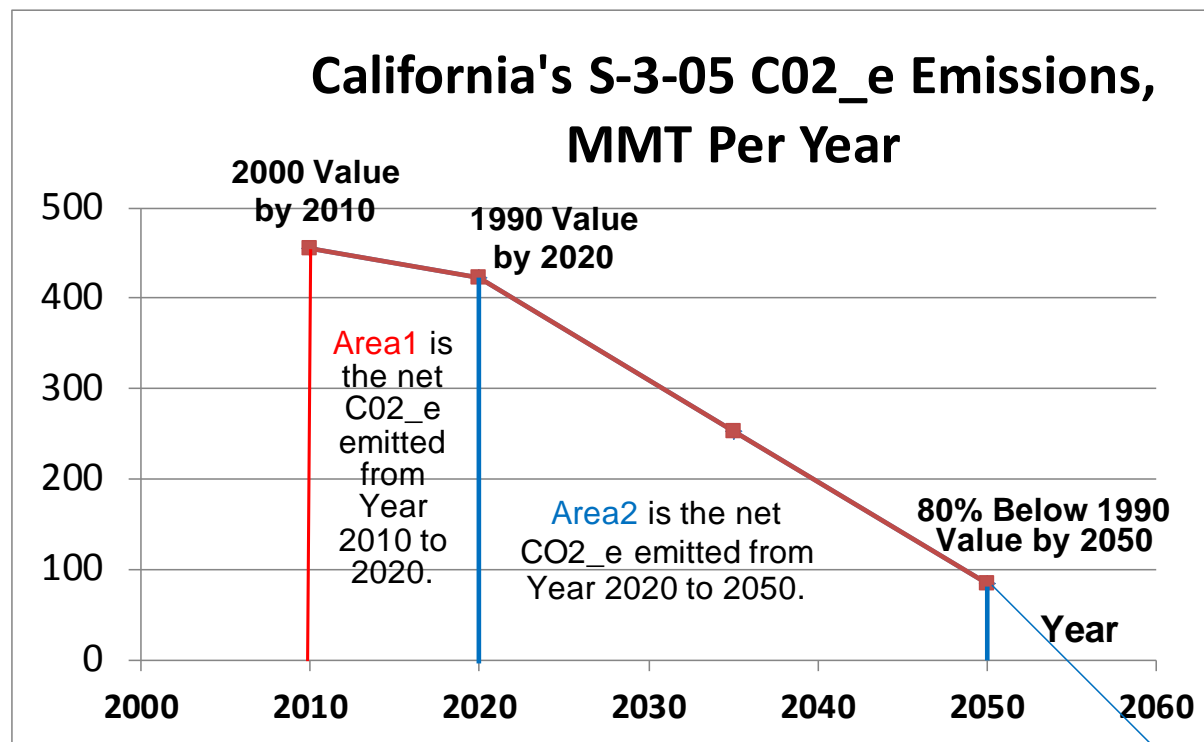
Unfortunately, that has not been done.

1.0 Comments on the Draft C-MAP's Chapter 1, Introduction

Section 1.3, "Climate Science" contains valuable information. It should be improved. The point should be made that, primarily due to our burning fossil fuel (coal, natural gas, gasoline, and diesel), we are adding great quantities of CO₂ to the atmosphere and that atmospheric CO₂

traps heat. The section is missing a description of the extreme danger we face. The human catastrophe of climate destabilization needs to be described.

Figure 1 Plot of What Climate Scientists Say California Must Achieve to Support Climate Stabilization (S-3-05)

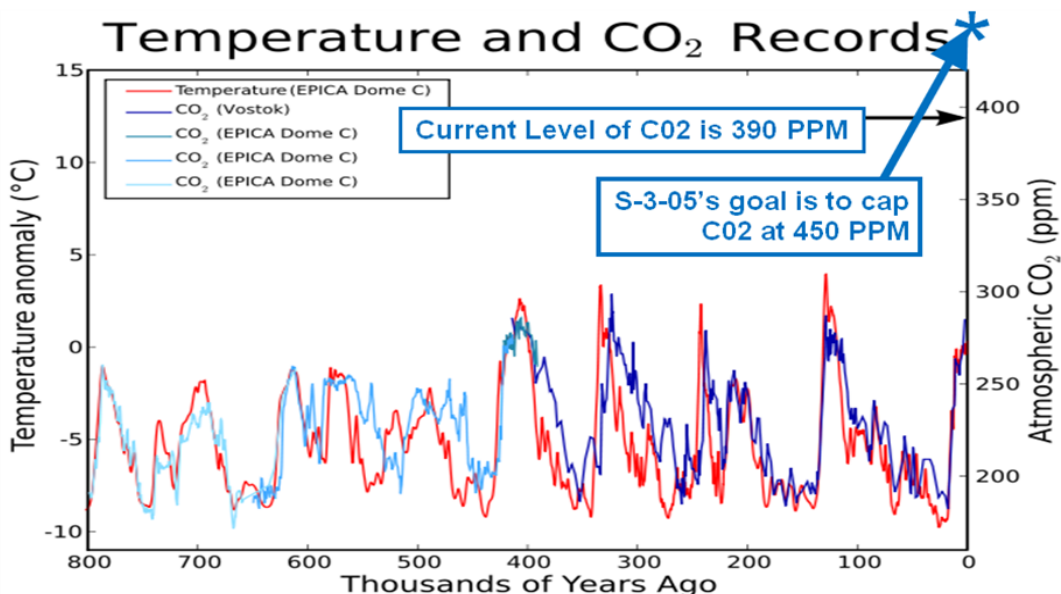


More specifically, this section fails to inform the reader (often, a decision maker) of the urgency and extreme danger posed by our climate crisis. The June 2008 issue of *Scientific American* (*The Ethics of Climate Change*, by Professor John Broome) reports that the levels of GHG expected in 20 years (16 years now) will result in a 5% chance of a 14.4 degree Fahrenheit increase in the earth's temperature and this would be an "utter catastrophe" and create the possibility of a "devastating collapse of the human population, perhaps even to extinction".

The C-MAP's Figure 1.1 fails to show the historic temperature profile. For that information, it is necessary to also show Figures 2 and 3 of this letter. They are known to be factual representations. Note that the 450 PPM value is shown. That would be a level of atmospheric CO₂, if the world achieves the S-3-05 trajectory (Figure 1, for California), which it probably will not. However, if the world somehow manages to achieve the S-3-05 trajectory, the value of 450 PPM would occur in year 2050. The atmospheric level of CO₂ then needs to be brought down to less-dangerous levels, by further reductions in emissions. To reduce atmospheric levels of CO₂ the amount emitted each year would need to be less than the total net CO₂ sequestered by all natural processes.

Figure 2 shows that the CO₂ levels shown on your Figure 1-1 plot, which are around 370 PPM, correspond to temperatures of nearly 10 degrees Centigrade. Such temperatures would risk a catastrophic collapse of the human population, to include the eventual extinction of our species.

Figure 2 **Atmospheric CO₂ and Mean Temperature, 800,000 Years Ago, with 450 PPM CO₂ Shown**



There are no adaptation strategies that could successfully deal with such an outcome. Figure 3 clearly shows that, although the temperature rise is somewhat masked by solar activity, underneath that relatively high-frequency temperature variation, the temperature rise, which is due to the trapped heat caused by the higher-than-normal CO₂, is already taking place. The trapped heat's effect on our atmosphere will be delayed as it melts ice and warms the ocean. We must at least achieve the S-3-05 trajectory. It is our only hope.

Reference 1,

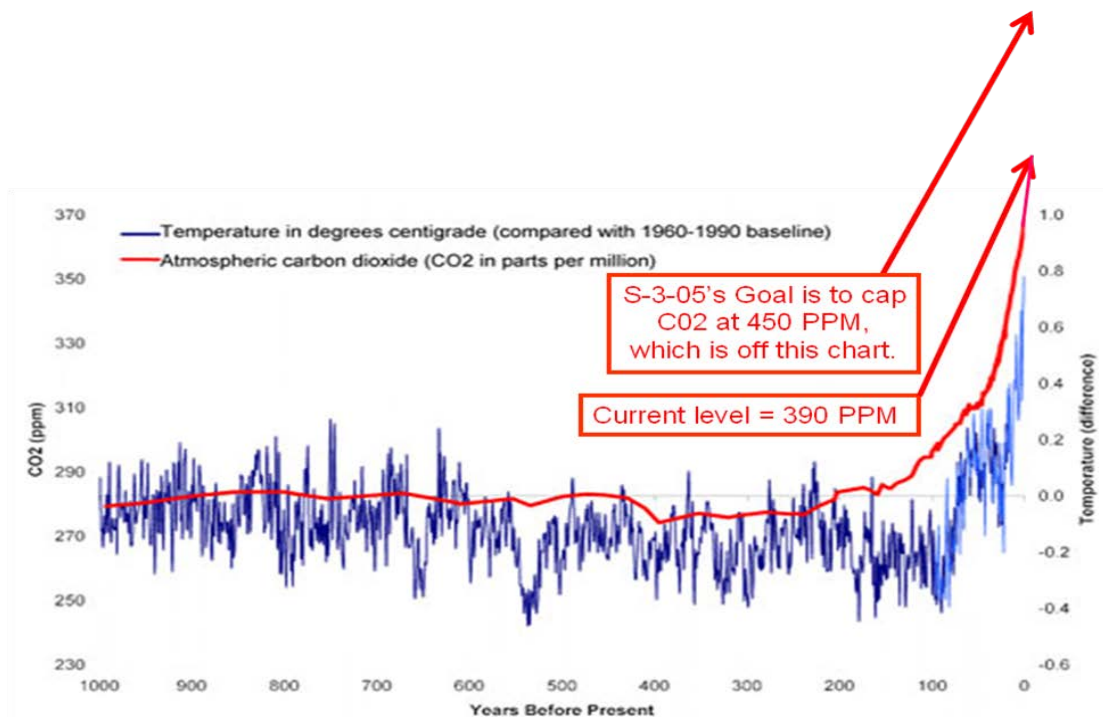
<http://www.aqmd.gov/ceqa/handbook/GHG/2009/april22mtg/CBDcomments.pdf>, has descriptions of the likelihoods of various S-3-05 outcomes, first in terms of temperature rise. Even if we achieve S-3-05, there is a 50% chance that the temperature rise will exceed 2 Degrees Centigrade. A 2 degree Centigrade rise in temperature would have very serious negative consequences, as described in Reference 1. There is a 30% chance that the temperature change would exceed 3 Degrees Centigrade, which is described as "exponentially worse" than the 2-Degrees-Centigrade outcome. And so on. Having the world atmospheric level of CO₂ go above 500 PPM is unthinkable and yet that seems to be exactly what is happening.

The omission of these facts in Section 1.3 amounts to a cover up of our dangerous and currently out-of-control predicament. We are threatened with nothing less than extinction.

The discussion also covers up the fact that changes are happening much faster than earlier descriptions would lead us to believe. For example, in <http://www.globalenergyworld.com/mobile/news/6124/>, we learn that current trends would eliminate the summer ice at the North Pole by 2020. The earlier descriptions said it would happen before 2100. In the article, NASA climate expert James Hansen pointed out that we are in a planetary emergency.

The insert on Page 1-5 on Mitigation and Adaptation should be improved. The point needs to be made that no adaptation can be successful without sufficient mitigation. How much is sufficient needs to be evaluated and explained in your report.

Figure 3 Atmospheric CO2 and Mean Temperature, Over the Last 1,000 Years



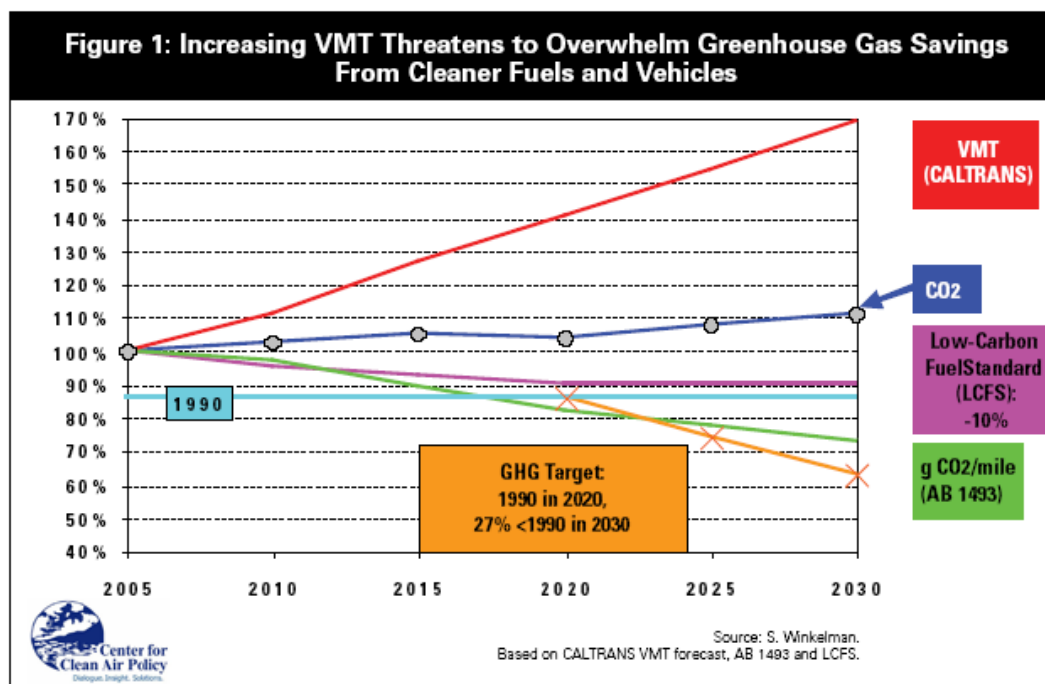
The cap and trade section, on Page 1-6 is not particularly useful and its inclusion suggests to the reader that this can take care of the problem. However, capping gasoline by price or availability is a poor strategy that risks a severe political backlash. CARB's AB 32 Scoping Plan states that cap and trade is a "back stop" meaning that it might save us if other strategies fail. San Diego's C-MAP is a document where good plans could be formulated. These plans must increase fairness while they reduce driving. They must be transparent. They must be acceptable to the public. This is an important reason that the severity of our climate crisis should be fully described.

2.0 Comments Chapter 2, Regulatory and Policy Guidance

2.1 AB-1493 and the Low Carbon Fuel Standard (LCFS)

It is very disappointing that you have omitted AB-1493, also known as "Pavley1" (named after State Senator Fran Pavley), which mandates reducing the CO2 per mile driven, average, for our California fleet of cars and light-duty trucks. This chapter needs to include Figure 4 of this report. Figure 4 is taken from Reference 3. It is Steve Winkleman's plot and is the basis for SB-375. "Pavley" is shown as the green line on Figure 4. The LCFS is shown as the purple line on Figure 4. Winkleman's plot will pull various strategies together and show why we need to reduce VMT. Leaving out Steve Winkleman's plot is unacceptable.

Figure 4 S-3-05 Trajectory (the Gold Line) AND the CO2 Emitted from Personal Driving (the Blue Line), where that CO2 is a Function (the Product) of the California-Fleet-Average CO2 per Mile (the Green Line), Predicted Driving (VMT, in Red), and the Low-Carbon Fuel Standard (in Purple)



There is no particular significance to the “outpouring of support”, claimed for the LCFS, on Page 2-1. CARB hearings show that there is also opposition from organization that advocate for “food not fuel”. We need to realize the LCFS mandate is not going to be easy to achieve and we need to plan a safety factor into our driving reduction targets, in case the LCFS mandate does not materialize. This is also true for the Pavley trajectory.

2.2 S-3-05

Your paragraph on S-3-05 is inadequate. The trajectory of Executive Order S-3-05 is much more important than just the numbers in an Executive Order. Your failure to recognize its importance shows a lack of understanding of the science and mathematics of climate stabilization. The numbers contained in S-3-05 are no less than a road map to human survival. It has 3 points, not just the 2 you name. The point you left out is 2000 levels by 2010. Perhaps you thought that since the current year is beyond year 2010, this point is not important. Nothing could be further from the truth. What matters is the area under the two straight lines. I have shown this in Figure 1. Reference 1 explains the importance of S-3-05 and its result of 450 PPM. Reference 1 and all of Reference 1’s references need to be described in your Chapter 2. The fact that the S-3-05 trajectory is the target of an executive order is also important. However, Reference 2 shows that CARB ignored S-3-05 when it executed SB 375. San Diego must take responsibility for supporting climate stabilization.

2.3 Global Warming Solutions Act of 2006

Your Global Warming Solutions Act of 2006 description again shows your lack of understanding of the science and mathematics of climate stabilization. There is no way a single target in a single year can be a “Solution”. What matters is the trajectory of reductions provided by the climate scientists. AB 32 only includes one point because that is all that the legislature could get passed. This weakness should be pointed out, not covered up. The single point is the middle point of S-3-05. It gives no guidance for the years before and after year 2020. Again, the area under the two straight lines, as shown in Figure 1 is what matters. CARB has earned our distrust since they gave year 2035 targets to our state’s MPOs, like SANDAG, that are about one-third what is needed to support climate stabilization. This will be shown later in this letter. CARB has given the cities a target for year 2020 of 15% below the 2008 values. This may or may not be equivalent to what really must be achieved, which is the 1990 value, by 2020. What is the relationship between 15% below the 2008 value and the 1990 value that must be achieved by year 2020?

2.4 SB 375

2.4.1 Unacceptable Oversight: Climate Stabilization Question

Your comments on SB 375 are correct. However, they do not consider whether or not the targets provided by CARB equate to having the car-and-light-duty truck sector support climate stabilization, with S-3-05 serving as the proxy for climate stabilization. Governments have a responsibility to protect the health and safety of its citizens, even young people. Instead of just accepting the GHG 2035 target of 13%, it is necessary to compute what is required to support climate stabilization. The calculations are shown in Reference 2. Also, it is misleading to call the reduction “GHG”. It is really a reduction in vehicle-miles-travelled (VMT) as will be shown. Finally, you should state that the reductions are per-capita and with respect to year 2005. These facts are by conventions adopted by CARB.

2.4.2 Compute the Required Driving Reductions (Reductions in VMT)

2.4.2.1 Introduction

The required 2035 value of driving reductions can be computed. The calculations for SANDAG, for the Year 2035, will be shown here. Driving reductions are per capita, with respect to Year 2005. This can be understood by carefully considering the following two items:

- 1.) Page 8, of http://arb.ca.gov/cc/sb375/staffreport_sb375080910.pdf, which says, “The RTAC recommended that targets be expressed as a percent reduction in per-capita greenhouse gas emissions from a 2005 base year”
- 2.) the first footnote in the table of CARB calculations, <http://arb.ca.gov/cc/sb375/mpo.co2.reduction.calc.pdf>, which says: “The CO2 emissions presented in this table do not include reductions from Pavley (better mileage for the California fleet of cars and light duty trucks) and LCFS (low carbon fuel standards) regulations.”

Since no reductions are counted from Pavley and the LCFS regulations, reducing driving is the only way to achieve these reductions. “Pavley” (named after Senator Fran Pavley) refers to a lowered average CO2 per mile driven. Both “Pavley” and the “LCFS” reduce the emissions per mile driven. Since these reductions are not being counted, the reductions shown come only from per capita, percent reductions in driving, or “vehicle-miles travelled”, VMT. *Therefore, the so-called GHG per-cent reductions are really VMT per-cent reductions.*

2.4.2.2 Background Information

2.4.2.2.1 Factors Used to Compute Required Driving Reductions

The reduction in per-capita personal driving, needed to achieve any desired level of GHG emission, can be computed using predicted population growth and two of the variables shown in Figure 4, which is Reference 3's Figure 1. The two needed values are the CO₂ emitted per mile driven (the green line, sometimes referred to as "Pavley", since AB1493 was authored by Senator Fran Pavley) and the fractional advantage from achieving low carbon fuel standards (LCFS, the purple line).

The variables plotted in Figure 4 are the factors which can be used to multiply 2005 values to get the values for the year shown. For example, in 2030, the CO₂ emitted from the cars and light-duty trucks in California (the dark blue line) can be computed to be 1.12 times as large as it was in 2005. It can also be said that the value will be 12% larger than it was in 2005. Likewise, the green line, which is CO₂ per mile driven, for the California fleet of cars and light-duty trucks, is predicted to be .73 times the 2005 value. This means the value is predicted to be reduced 27%, below its 2005 value. Figure 4 also shows that the 1990 value of emissions (the light blue line) was about 13% less than it was in 2005.

The S-3-05 trajectory is shown as the gold (or dark yellow) line. It is the factors that can be used to convert 2005 values of emissions to values for the years shown. For example in 2030, emissions will need to be 37% lower than they were in 2005, to meet the S-3-05 mandate.

To make use of these variables, the following mathematical facts are used.

If variable "A" is equal to the product of variables "B" and "C" and the multipliers used to convert these three variables to some future time are "f_A", "f_B", and "f_C", then

$$\text{Equation 1: } A = B * C$$

$$\text{Equation 2: } F_A * A = F_B * B * F_C * C = F_B * F_C * B * C$$

Using Equation 1, Equation 2 can be written as

$$\text{Equation 3: } F_A * A = F_B * F_C * A$$

Dividing both sides by "A" gives

$$\text{Equation 4: } F_A = F_B * F_C$$

It would seem that emissions would be equal to the miles driven (the red-line value) multiplied by the CO₂ per mile driven (the green-line value). However, by convention, the Low Carbon Fuel Standard must also be multiplied to get the emissions. By extension of the above result (from 2 variables to 3 variables), this means that the dark-blue-line values are the product of the green-line values, the red-line values and the purple-line values. For example in 2030, the dark-blue value of 1.12 can be computed by multiplying the green-line value of (.73), times the red-line value of (1.7), times the purple-line value of (.9). As a check, $(.73) * (1.7) * (.9) = 1.1169$, which is reasonably close to the (eye-ball-estimate) value of the dark-blue line, for year 2030, 1.12.

2.4.2.2.2 Observation on Business as Usual (BAU)

Although the primary purpose of Section 2.4.2.2 is to explain the relationship between the values of Figure 4, so they can be used to compute the needed driving reductions, the sample calculation for the year of 2030 shows that "business as usual" (BAU) driving, which

is represented by the Figure 4 red-line values, will not allow the emission levels to get down onto the gold line (S-3-05), as needed. In other words, Pavley and the LCFS are not enough. This shows the need for SB 375. It also shows that the C-MAP must identify enforceable strategies to achieve significant driving reductions.

2.4.2.3 Overview of the Key Relationship and Derivation of the Needed Formula

The S-3-05 net reduction in GHG emissions, from cars and light-duty trucks, expressed as a fraction of 2005 emissions, is obtained by multiplying four factors together. Using the information presented in Section 2.4.2.2 and the definitions of Table 1, the following equation (the key relationship) can be used.

$$\text{Eq. 1} \quad f = f_{\text{Pavley}} \times f_{\text{Fuel}} \times f_{\text{Population}} \times f_{\text{Per CapitaVMT}}$$

Eq. 2 is derived from Eq. 1.

$$\text{Eq. 2} \quad f_{\text{PerCapitaVMT}} = f / (f_{\text{Pavley}} \times f_{\text{Fuel}} \times f_{\text{Population}})$$

Table 1 Factor Definitions, with Respect to Year 2005

Factor Definitions	
<i>All are for for the year of interest, with respect to year 2005 values. Except for Population, all are for cars and light-duty trucks.</i>	
f	net factor of the emissions of Greenhouse Gas
f_Pavley	factor of the average statewide mileage
f_Fuel	factor of the reduction of GHG due to fuels that burn less carbon
f_Population	factor of the population in the region of interest
f_PerCapitaVMT	factor of per capita driving

2.4.2.4 Getting the Values to Use in the Equation

Figure 4 is from Reference 2 (<http://www.nrdc.org/globalWarming/sb375/files/sb375.pdf>), a widely-respected report on SB-375. Figure 4 will supply all of the needed values, except for the factor of population. Neither Figure 4's red-line values nor its blue-line values are used. Its gold (or dark yellow) line is the S-3-05 trajectory.

2.4.2.4.1 Getting the Net Factor of the S-3-05 Emissions of Greenhouse Gas in 2035, with Respect to 2005 Values

To get the net factor of the emissions of GHG, for year 2035, and with respect to year 2005, it is necessary to extrapolate the Governor's Executive Order target values (the gold line of Figure 4), out to year 2035. Figure 4's gold line shows that this factor is 0.87 in 2020 and is 0.64 in 2030. Therefore, in year 2035, the factor will be

$$0.64 + [(.64 - .87) / (2030-2020)] * (2035-2030) = 0.525$$

2.4.2.4.2 Getting the (Pavley) Factor of the Average Statewide Mileage in 2035, with Respect to the 2005 Value

To get the Pavley reduction factor, for Year 2035, it is necessary to extrapolate the average statewide mileage factor data, which is Figure 4's green line, out to Year 2035. It is 0.82 in 2020 and it is 0.73 in 2030. Therefore, in Year 2035 the statewide mileage factor data will be

$$0.73 + [(.73 - .82) / (2030-2020)] * (2035-2030) = 0.685$$

Pavley 1 ends in Year 2017. It is widely assumed that it will be replaced by what is often called "Pavley 2". The extrapolation computed here is based on the assumption made by the author of Figure 4, as shown in the slope of the green line from year 2020 to 2030. Based on the authoritative credentials of the authors of Figure 4, this is the best assumption that can be made at this time. Assuming that the California fleet will continually get more efficient, in terms of CO₂ per mile driven, relies on an assumption that a significant fraction of our car owners will be able to purchase newer-model cars, that there will be a continued political will to keep pushing car makers to improve efficiency, and there will be no insurmountable technical barriers to improved efficiency.

2.4.2.4.3 Getting the Factor of the Reduction of GHG Due to Fuels that Burn less Carbon

Looking at the purple line of Figure 4, it is clear that this factor will be 0.9 in 2035.

2.4.2.4.4 Getting the Factor of the Increase in Population

The factor for population in San Diego County is computed using the populations estimated in CARB's <http://arb.ca.gov/cc/sb375/mpo.co2.reduction.calc.pdf>, namely 3,034,388 people in 2005 and 3,984,753 people in 2035. So the factor, from 2005 to 2035 is $3,984,753/3,034,388 = 1.313$. (This could be smaller for the City of San Diego.)

2.4.2.5 Computing the Required Per-Capita Driving Reduction, for 2035

The 4 values, computed in Subsection 2.4.2.4, are used in Eq. 2, to compute the required factor.

$$\text{Eq. 2} \quad f_{\text{PerCapitaVMT}} = .525 / (.685 \times 0.9 \times 1.313)$$

Therefore, $f_{\text{PerCapitaVMT}} = .649$.

This corresponds to a 35.1% reduction in per-capita driving, in year 2035.

2.4.2.6 Computing the Net Amount of Driving, in 2035, Compared to 2005, and its Significance

The net factor of driving in 2035, compared to 2005, is the product of the per-capita factor of driving (.649, as just computed) and the factor of population change (1.313, as computed in Subsection 2.4.2.4.4).

Multiplying these two factors together (increase-in-driving-per-population factor multiplied by the increase-in-population factor) gives a factor as follows:

Factor of net driving in 2035 compared to 2005:

$$= .649 \times 1.313 = .8515.$$

This means that even though San Diego County's population will grow by 31.3%, from 2005 to 2035, the people living in San Diego County must collectively drive nearly 15% less than the people in San Diego County drove in 2005. This is important information. It means that there is no reason whatsoever to expand roads. This is good news because it means

that money earmarked for highway expansion can be used to upgrade transit. It also means it is time for both SANDAG and the San Diego to step away from “Business As Usual” because policies will have to be adopted to reduce driving.

2.4.3 SB-375 Conclusion

The climate-stabilization-supporting driving reduction for San Diego should be computed. It is doubtful that the results will differ much from the County calculations. If the population growth is slower, that means the per-capita driving reduction will be smaller than the 35.1% value computed for the County. However, the 15% net reduction would not change. For safety and conservatism, it is hereby assumed that the per-capita driving reduction, with respect to 2005 should be 35.1%, for the City of San Diego.

2.5 SB 97

It is repeated that destabilizing levels of GHG are unacceptable, due to the severity of destabilization. GHGRP’s must ensure support for climate stabilization. This is the key point that has been missed by the effort so far.

2.6 Adaptation Strategy

As stated previously, this section must clearly state that adaptation is impossible without sufficient mitigation. How much mitigation is sufficient should be one of the primary determinations of the C-MAP. Instead, the authors of the C-MAP seem to take the view that the CARB mandates for 2020 are sufficient and the 2035 Target needed to support climate stabilization does not have to be met. Adaptation is important if the world manages to stabilize the climate at a livable level. In that case, adaptation makes sense. Otherwise, adaptation can only delay some bad outcomes and, during the delay, worse outcomes may occur.

2.7 Regional Actions, SANDAG

This section fails to question whether or not the CARB target of reducing driving by 13% by 2035 has any relationship to what is needed to support climate stabilization. As shown in Section 2.4 of this letter, the correct number is 35.1%, not 13%. CARB has betrayed the trust of all people. They have defeated the intent of SB 375. SANDAG played a major role by suggesting the 13% value to CARB, without any consideration as to its climate stabilization support. Instead, SANDAG assumed that all of their freeway expansion plans could be executed and then computed the 13% value, so that freeway expansion could continue.

2.8 Region Actions, Port District

The description is only about adaptation. This is incorrect. The Port must also do mitigation. As always, you fail to mention that the Port cannot adapt to destabilization.

2.9 Regional Actions, Water Authority

As always, you fail to mention that the water authority cannot adapt to destabilization.

2.10 Regional Actions, San Diego County

The county’s CAP fails to support climate stabilization. Therefore, it fails to be consistent with CEQA guidelines. You mention AB 32 (a single target for 2020) but fail to mention the trajectory of S-3-05. Again, your apparent view is that climate stabilization is not worth consideration.

2.11 Your Figure 2.2

This figure fails to show the connection from CARB to SANDAG. That connection is required by SB 375. Under SB 375, CARB gives SANDAG driving reduction targets for the years 2020 and 2035.

2.12 CMAP Consistency with CEQA (Page 2-6)

As stated, the CMAP is a project under CEQA. If the project were done in accordance with CEQA, it would guarantee that the city has enforceable policies that will support stabilization. However, in its current form, it sets a precedent of not incorporating the science and mathematics of climate stabilization and then identifying sufficient feasible mitigations that will support that stabilization. It sets an example of failure. If other cities follow this example, California will not be able to support stabilization. Many states have no interest in stabilization. California needs to succeed in supporting stabilization, in part, to set an example. It is difficult to ask China and India to stop building coal-fired electrical generating plants while California and other states are expanding their freeways, in spite of the fact that the science and mathematics of climate stabilization shows that we must drive less, even as our population increases and in spite of the fact that our cars and fuels are getting cleaner. This CMAP contributes to climate destabilization and fails to consider feasible mitigations. As one example of an ignored feasible mitigation, even though you posted a report that explains the strategy of unbundling the cost of car parking, <http://www.sandiego.gov/environmental-services/pdf/sustainable/parkingcosts.pdf>, you ignored it. This is in violation of CEQA law, which requires your full consideration of feasible mitigations that have been brought to your attention.

3.0 Comments on Chapter 3, Emission Inventory, Forecasts, and Reduction Targets

Your decision to use the average emissions over years 2004 to 2008 to establish a “current baseline”, relative to CARB’s Scoping Plan, is probably reasonable, since the date of the Scoping Plan is 2008. You should quote the 2008 Scoping Plan, http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf, on Page 28, where it says:

In addition to tracking emissions using these protocols, ARB encourages local governments to adopt a reduction goal for municipal operations emissions and move toward establishing similar goals for community emissions that parallel the State commitment to reduce greenhouse gas emissions by approximately 15 percent from current levels by 2020.

This 15% below “current” levels is, we hope, a proxy for the more correct 1990 levels, given to us by climate scientists as a target for 2020. You should state this, if it is true. We will have to assume it is true. It seems reasonable from our other readings. For example, Figure 4 shows 1990 emission levels to be 13% below 2005 levels. This may be 15% below 2008 levels.

Figures 3.1 through 3.6 show that transportation is a significant contributor and will grow in its importance, unless meaningful policies are adopted.

Table 3.2 shows a margin for 2020 of about 150,000 MTCO₂e, which is good news. However, the problem is that unless this C-MAP is improved, government will put off the strategies that must be developed so that in 2020, the steep slope (emission reductions per year) of emissions needed (as described in S-3-05 as, by 2050, 80% below the 2020 target, which is to say the 1990 levels) can be achieved, so as to follow the trajectory needed that is shown in Figure 3.7. For transportation, this corresponds to the large 35.1% per-capita driving reduction

(with respect to 2005) needed by 2035. The Figure 3.7 value, for 2035 can be computed as the product of the 2020 target of 10,754,970 and the factor of (.6), because this is a 40% reduction, half of the 80% needed by 2050. The value is 6,452,982 MT CO₂e. This means that that Figure 3.7 does show the trajectory that MUST be achieve if the C-MAP is going to support climate stabilization, as it must.

By using the 2020 BAU value from Table 3.2, of 14,643,089, the 10.5 years from the baseline (computed by subtracting the year 2009.5 from year 2020), and the baseline value of 12,652,906, it is possible to compute the slope from 2009.5 to 2020 and use it to compute the projected 2035 value of 17,486,207, for BAU. All of the significant values of Figure 3.7 need to be explained in terms of how they are computed.

The bottom of Page 3-4 contains the following dissappointing statement, in response to Figure 3.7, where emphasis has been added to highlight the worst sentence:

*Since the time horizon of the CMAP carries the City forward to 2035, measures have been recommended that will continue to reduce GHG emissions after 2020. For planning and illustrative purposes, the CMAP assumes that the same GHG reduction measures used to meet the 2020 target will be implemented through 2035 with increased participation rates. **However, the City also anticipates that changes to federal and state regulatory framework and advances in energy efficiency technology will occur.** Therefore, the City may amend the CMAP after 2020 and allow these changes to supplement or replace some of the measures. **It is clear that the collective effect of these additional state and federal mandates and emerging technologies will be needed to achieve the 2035 reduction target.***

In the first place, Figure 3.7 shows a complete failure of the C-MAP to achieve the reductions required to support climate stabilization. In the second place, why does "the City" "anticipate" changes to state and federal regulations and advances in technology? The San Diego Republican mayor and his party supported Proposition 23, which would have suspended AB 32. If Mr. Romney were to win the presidential election, there is little chance that the federal government would advance new regulations. It would be more likely that the federal government will stop enforcing regulations and give the fossil fuel industry even more of what they want than the current Obama administration. If mayoral candidate De Maio becomes the next mayor, he has promised to focus on roads, not transit. He has given no indication that he is interested in climate stabilization. The current mayor has endorsed Mr. De Maio, who is also backed by the owners of the Union Tribune, a newspaper that has hardly distinguished itself on the topic of climate. The failure shown Figure 3.7 (quantified in Section 4.1 of this letter) means that additional feasible strategies are needed, not wishful thinking. Who do you consider to be the "City"? How does the "City" have the technical background to know that advances in technology will emerge that will save us? The Pavley trajectory is assuming more efficient cars will be invented, marketed, and bought at some best-estimate rates. How is the "City" qualified to assume that some better outcome will occur? The current (and perhaps next) mayor belongs to a political party that has been working to eliminate the regulations that make the Pavley trajectory more likely. For example, the previous President of the United States sued California, challenging its right to enact Pavley (AB 1494).

4.0 Comments on Chapter 4, Geenhouse Gas Emissions Reduction Measures

4.1 Table 4.

Table 4's title and the discussion of Table 4.1 cover up the failure of the C-MAP to achieve the reductions required to support climate stabilization. The title of Table 4.1 is "Local and State/Federal Strategies and Related GHG Emission Reductions for 2020 and 2035 *to Reach Target*". However, the emissions fail to reach the target, for 2035. The phrase "to Reach Target" is incorrect. The 2035 reductions do NOT reach the target.

In order to do your job and show this, quantitatively, it is necessary to go back to Table 3.2 and Figure 3.7. By using the 2020 BAU value from Table 3.2, of 14,643,089, the 10.5 years from the baseline (computed by subtracting the year 2009.5 from year 2020), and the baseline value of 12,652,906, it is possible to compute the slope from 2009.5 to 2020 and use it to compute the projected BAU 2035 value of 17,486,207. Since the 2035 value of emissions must be 40% below the 2020 value, the 2035 emission level must be 10,754,970 (from Table 3.2) times (.6). This is 6,452,982. Therefore the net emission reductions that must be achieved in 2035 are $17,486,207 - 6,452,982 = 11,033,225$. However, Table 4.1 shows that the total GHG reductions are only 6,762,879. This is a failure that betrays the trust of our young people. Quantitatively, the additional needed reductions, to support climate stabilization, are the difference as follows: $11,033,225 - 6,762,879 = 4,270,346$.

The column of Table 4.1 titled as "% of Total Reduction", is the % of the total reduction achieved by this unacceptably weak C-MAP, NOT the % of what is needed. Of course the achieved totals will sum to 100%. The title of the Table, which included the false phrase, "to Reach Target" and the sum, which is 100%, is sure to lead the casual reader to conclude that the target reductions are being met, "100%".

4.2 Table 4.3's Emission Category of Transportation, Parking Policy Change to Improve Multimodal Transportation Options

The parking strategies described as "decrease parking spaces" and "increase parking prices" suggested by the Energy Policy Initiative Center (EPIC) are weak because

- 1.) they only apply downtown, and most driving is done in the suburbs and
- 2.) they are sure to be met with politically-motivated objections that are not without considerable merit.

As shown in Figure 5, I made this point nearly a year ago. As shown in Figure 6, Linda read the contents and the ideas made sense to her. The fact that no one contacted me further is another indication that feasible mitigations are not being considered.

There will be more information on how to unbundle the cost of parking in Section 6 of this letter.

4.3 The C-MAP's Section 4.3

It is good that you recognize that reducing VMT should be the highest priority for meeting climate requirements.

It is unfortunate that you use the word "pricing". We all pay the price, even if we never drive. Parking is expensive to provide and the price gets paid by everyone.

Figure 5 Email Explaining the Problems with the EPIC Parking Suggestions

From: Mike [mailto:mike_bullock@earthlink.net]

Sent: Saturday, December 17, 2011 11:34 AM

To: Pratt, Linda Giannelli

Cc: mdisenhouse@cox.net; karibu7@cox.net; janina.moretti@gmail.com; petriep@hotmail.com; franco@environmentalhealth.org; Scott Anders; Nilmini Silva-Send

Subject: Regarding SD's C-MAP's Approach to Parking Policy

Linda Giannelli Pratt

Chief Program Manager

Re: SD C-MAP's Approach to Parking Policy

Hi Linda,

I would like to improve this C-MAP. I am so pleased that EPIC is involved. They are the best and Nilmini (Dr. Silva Send) and I already have a good working relationship. She is one of the local people that helped me get my parking plan ideas formulated. Unfortunately, we have not had a policy discussion in over 3 years and my ideas have evolved beyond "cashout", which was my primary interest the last time we talked.

The current C-MAP Parking policy proposal is

1. Less parking

2. Charge for it

These reinforce common misconceptions:

- **government wants to make our lives miserable**
- **parking is actually free now.**

Both proposals, as stated, are like a "please punch me here" target. Kevin Faulkner's aid made the "point": we need more parking, so these are bad ideas; I am defending the interests of the people in my district!

So I think the CMAP's current work on parking can be improved, from just a political-strategy standpoint. Besides this, I think the free market should determine the amount of parking. The amount will naturally decline, if we have a good system in place. The off-street parking ordinances are now seen by many as no more than a baseline starting point. SANDAG has a good report showing that there is usually too much parking. We can and must move beyond SANDAG on how to price, which is to "unbundle the cost". The key of "unbundling" is that regular people get parking-lot earnings. This will help, politically, because most people like to get money mailed to them.

Here is a better one-sentence description:

- **A comprehensive policy to unbundle the cost of parking, to include the possibility of positive TDM, if needed.**

The response to that description will be the far better: "what the heck does that mean?" This is a good response. The person asking the question can then learn that

- 1.) Parking is never free
- 2.) Consumers deserve to know where their money is going. (They are suffering a lower wage, a higher rent, and a higher cost of most of the things they buy, due to "free" (or underpriced) parking.)
- 3.) This current inequity can and should be fixed, even without the threat of climate destabilization
- 4.) This fix, with just the free-market base price, might be enough and
- 5.) If not enough, the new infrastructure will support price increases beyond the fair-market price, if needed (this is "positive TDM"; the start point is "zero TDM"; free parking is "negative TDM"; see the bottom of Page 7, Reference 4 .

Most unfortunately, "positive TDM", like "unbundling the cost of parking" is only explained one place in the world and that is my published report, which I have attached. **Let's work together in 2012 to make parking policy the strongest part of this plan.** We must leap-frog over "best practice", if we are going to have success. This was clear at Thursday's Port C-MAP meeting, once the reductions were considered beyond 2020. They are very large. It would be best to move beyond BAU thinking now. For parking, we can start with a formulation and then a simplified demonstration project.

Regards to all,
Mike Bullock

Figure 6 **Email With Showing a Positive Reaction to the Proposed Change**

From: [Pratt, Linda Giannelli](#)
To: [Mike](#)
Sent: Monday, December 19, 2011 10:07 AM
Subject: RE: Regarding SD's C-MAP's Approach to Parking Policy

Great comments, Mike, and I can see how your proposal may be a better approach. I will check with our team and see how this works with the Development Services Dept.

Thanks again very much!

Linda
Linda Giannelli Pratt
Chief Program Manager
Our San Diego.
What's your legacy? Planet now.
www.SDClimateMAP.org
City of San Diego Environmental Services Department
office 858-492-5088 cell 858-518-7834
LPratt@SanDiego.gov

From: Mike [mailto:mike_bullock@earthlink.net]
Sent: Saturday, December 17, 2011 11:34 AM
To: Pratt, Linda Giannelli
Cc: mdisenhouse@cox.net; karibu7@cox.net; janina.moretti@gmail.com; petriep@hotmail.com; franco@environmentalhealth.org; Scott Anders; Nilmini Silva-Send
Subject: Regarding SD's C-MAP's Approach to Parking Policy

Linda Giannelli Pratt
Chief Program Manager

Re: SD C-MAP's Approach to Parking Policy

Hi Linda,

I would like to improve this C-MAP. I am so pleased that EPIC is involved. They are the best and Nilmini (Dr. Silva Send) and I already have a good working relationship. She is one of the

The better word is “unbundling”, which is short hand for the phrase is “unbundling the cost”. California spends about \$4B per year to maintain our roads, but only gets about \$2B in gas tax, which is the closest thing we have to a road use fee. San Diego could be influential at SANDAG and SANDAG could in turn be influential with our state government on this issue. Unbundling the cost of parking could be done by San Diego with no help from SANDAG. However, SANDAG would quickly endorse the concept if San Diego decided to start an implementation program. There is nothing about technology to efficiently unbundle the cost in a way that is cost effective and convenient for both drivers and non drivers. This is explained in Section 6.

Money spent to reduce driving, whether it is to incentivize “smart growth”, unbundle driving cost, or make it easier to use the alternatives such as active transportation or transit, should always be prioritized on the metric of VMT reduction per dollar spent.

Please see Section 6 for the details on what transportation options should be advanced.

5.0 Energy Recommendations

- 1) The draft CMAP (appendix) assumes residential PV costs \$8/watt and commercial \$6/watt. Best in class residential is currently at \$3.50/watt (see attached SNL article quoting Clean Energy Partners/Google). CMAP should include a “best case” PV sensitivity scenario where 2012 rooftop PV is at \$3.50/watt residential, \$2.50/watt commercial PV. The 2020 best case assumed prices should be one-half these values per CEC projection of PV costs dropping in half from 2010 to 2020. 2020 rooftop PV is at \$1.75/watt residential, \$1.25/watt commercial PV. Assume all “best in class” rooftop PV systems use microinverters with 25-year guarantee (same as panels). The sensitivity scenario should include a recalculation of the projected rooftop PV in MW resulting from the lower cost of PV.
- 2) Include a quantitative description of the energy efficiency and zero net energy targets in the California Energy Efficiency Strategic Plan instead of simply noting the EE Strategic Plan exists (Masada – see p. 10 of attached PPT).
- 3) Include a quantitative description of the targets in Gov. Brown’s the Clean Energy Jobs Plan, specifically the target of 12,000 MW of new local renewable energy and 4,000 MW of new combined heat & power (CHP) statewide by 2020. Project how much of this capacity would be located in SDG&E territory based on a proportionate allocation, assuming SDG&E represents about 8 percent of statewide electricity demand. Local renewable energy for SDG&E territory should be about 1,000 MW, and new CHP would be about 300 MW by 2020 (Masada – see p. 11 of attached PPT).
- 4) It is important to include these quantitative values to put in context the rooftop PV and CHP capacity estimates included in the CMAP for 2020.

6.0 Transportation Strategies to Support Stabilization

6.1 Zoning and Other Strategies to Reduce Driving Near Good Transit Stops

Sprawl should be stopped. Zoning to increase density and height should be applied within walking distance of existing and funded transit stops on transit lines with service at or above levels shown to significantly reduce driving and car ownership for those living within walking distance of its stops. As soon as possible, California needs to implement an equitable and environmentally-sound road use fee pricing system that will unbundle the costs of building roads, of maintaining roads, and of the external economic losses road use imposes on society in general, such as environmental and health costs. This will cause the market to support so-called “smart growth”, mixed-use development over urban sprawl. The City needs to seek legislation to help make this happen.

“Smart” needs to be defined as “VMT-reducing”. This will allow strategies that are proposed or required at such developments to be evaluated for value. Unbundling the cost of parking should also be developed and required, as described in Reference 4. (Reference 4 was presented at the Sustainable Land Use and Transportation Session of the Air and Waste Management Association's 103rd Conference and Exposition, in the summer of 2010. It is

therefore published and peer reviewed.) This will give consumers, residents and employees more control over their money. It will also reduce driving, as shown in Reference 4's Table 1.

Zoning within the qualifying areas should eliminate density and height limitations, as well as minimum parking requirements. Investors will respect the market limitations as there will be poor demand for developments that don't work for those that buy, rent or lease in such developments. Besides this, when projects are proposed, good modeling will determine functionality. Meeting the relaxed zoning does not have to mean automatic approval. The political process will litigate the tension between neighborhood concerns and the need to reduce driving. The off-street parking ordinance should require that the parking costs are unbundled, using either the method of parking operating as its own profit center or using the methods describe in Reference 4.

6.2 TransNet Tax Reallocation

In Section 2.4.2 showed that driving in San Diego County must decrease by 15%, from 2005 levels. Therefore, there is no need for more highway lanes and so the TransNet tax money allocated to highway expansion needs to be reallocated to transit. Although this is a SANDAG Board decision, it should be pointed out by the San Diego Board members at every opportunity.

6.3 How to Increase Walking and Biking

The C-MAP's reliance on the SANDAG plans, including the Regional Bicycle Plan, should be reduced and the need to improve those plans should be stated. The primary problem with these plans stems from the refusal of the SANDAG Board to require that expenditures be ranked on their estimated ability to decrease driving. Project and strategy ranking should be based on driving reduction per dollar spent.

6.3.1 Education and Projects to Support Bicycle Transportation

As stated, the criteria for spending money for bicycle transportation should be to maximize the resulting estimated reductions in driving. The following strategies will probably do this.

6.3.1.1 Projects

Each of SANDAG's smart growth place types, both existing and planned, shown on SANDAG's well-documented Smart-Growth Concept Map, should be checked to see if bicycle access could be substantially improved with either a traffic calming project, a "complete streets" project, more shoulder width, or a project to overcome some natural or made-made obstacle. These projects should be prioritized using a cost/benefit ratio metric.

It is hereby assumed that 80% of the money available for the Regional Bicycle Plan (over a billion dollars) should be used to fund the projects. They should be selected for implementation, from top of the list (lowest cost/benefit ratio) down, until the money is used up. An example of one of these projects, for the proposed town center near the corner of I-5 and SR-78, is to devise a method to restore the shortest-distance route from Vista Way to Vista Way, which is currently broken by Interstate 5. This would connect a large South Oceanside coastal neighborhood with a regional shopping center, which includes a large grocery store. The current connection is long and hilly, compared to a bridge to restore the pre-I-5 route.

Building recreational bike paths is generally not a cost-effective expenditure. It sends a message that bikes do not belong on the road.

6.3.1.2 Traffic-Skills 101 Classes

The remaining 20% of the money should be used to do the following.

- 1.) Teach interested adults about bicycle accident statistics (most serious injuries occur to cyclists in accidents that do not involve a motor vehicle), car-bike accident statistics (most are caused by wrong-way riding and errors in intersections; clear cut hit-from-behind is rare), and how to ride in all conditions, to minimize problems.
- 2.) Teach riding-in-traffic skills and how to ride in other challenging conditions, by having the class members and instructor go out and ride in real conditions, until proficiency is achieved.

Students that pass a rigorous written test and demonstrate proficiency in traffic and other challenging conditions are paid for their time and effort.

These classes should be based on the curriculum developed by the League of American Bicyclists and taught by instructors certified by the League.

Assuming a class size of 3 riders per instructor and that each rider passes both tests and earns \$100 and that the instructor, with overhead, costs \$500 dollars, for a total of \$800 for each 3 students, means that \$200M (computed as 20% of \$1B) could educate $\$200M/\$800 = 250,000$ classes of 3 students, for a total of 750,000 students, out to year 2050. This is about 20% of the population of San Diego County.

6.4 Comments on Transportation Demand Management

SANDAG and all the cities and the county include "TDM" in their discussions of how to reduce VMT. By taking the position that transportation demand management must only be programs that reduce driving, many documents foster the widespread belief that driving levels are the result of free economic choice, and that this free choice must be made less likely by offering some new incentive to not drive or causing drivers to suffer some sort of punitive measure when they insist on driving. That approach to TDM is conventional but it is also misleading.

To engender objectivity, the concept needs to be considered beyond the conventional points of view. More specifically, TDM should be viewed as the adoption of policies that affect the amount of driving. These 3 classifications of TDM are suggested in Reference 4:

- "Positive", which reduces driving, such as charging for parking at a higher rate than what is justified by its value,
- "Zero", which is neutral in its affect on driving, such as charging for parking at the rate which is justified by its value, and
- "Negative", which increases driving, such as charging for parking at a lower rate than what could be justified by its value.

It should then be pointed out that so called "free parking" is a widespread form of a (significantly) negative TDM. The only way to make this TDM more negative would be to pay people for parking their car.

This treatment will increase objectivity towards the idea of "TDM". After all, who really wants their demand for anything to be "managed"? However, many current policies manage demand for driving by encouraging driving. If we could just get all the "levers" adjusted to "Zero TDM", all of our congestion and driving-related climate destabilization problems would be greatly reduced. Besides this, there is a basic fairness issue. Having at least "Zero TDM" should be the law of the land. This is true, even without the challenge and mandate of climate stabilization. One of the best TDM measures would be to unbundle the cost of parking in all locations, as explained in Reference 4. After these systems are

installed, it would be possible to adjust the charge above the zero-TDM level. It is important to note that the earnings go back to those for whom the parking is built. This makes the positive TDM more popular since everyone likes getting monthly earnings.

6.5 Unbundling the Cost of Car Parking

For the vast majority of destinations in California, the cost of car parking is hidden within other costs. This has serious consequences. For example, at most places of employment, parking costs reduce the wages that can be paid to all the employees, even those that never use the parking. Similarly, at most apartment complexes, bundled parking costs increase the rent and this is true, even for families that do not own a car. Bundled parking costs routinely increase the costs of goods, such as groceries, for all customers. Again, this is even true for those that do not drive. Since governments require businesses to provide minimum levels of parking, they are involved in this economic discrimination towards those that drive less.

Driving less is, to some degree, a lifestyle choice. Since government has no valid reason to encourage driving, the lifestyle choice of less driving deserves constitutional, or at least legal, protection from any practices that discriminate against it, economically. So far, the City has not taken an active role in educating its citizens on how parking policy effects economic fairness or how parking policies that are more fair could reduce driving.

On June 22nd 2010, I presented a paper on how parking could be operated to unbundle parking costs in a way that supports the sharing of parking. This was at the 101st Conference and Exhibit of the Air and Waste Management Association, in Calgary, Canada. The session, *Sustainable Land Use and Transportation*, included the paper, *A Plan to Efficiently and Conveniently Unbundle Car Parking Costs*. The paper was well received. It was published as a proceeding of the Conference. It is Reference 4. Reference 4 is therefore both peer reviewed and published.

The following points, taken from the Reference 4, apply.

- Vehicle miles traveled (VMT) are a major cause of global warming and pollution.
- California's Metropolitan Planning Organizations (MPOs) need to adopt strategies that reduce vehicle miles traveled (VMT), in order to at least meet the S-3-05 trajectory, for years 2020 and 2035.
- The appropriate pricing of parking is one of the least-costly tools documented to reduce VMT.
- New technologies, such as sensors feeding data into computer-generated billing and earnings distribution, offer the potential to efficiently bill drivers for parking, pay earning to those for whom the parking is built, and alert law enforcement of trespassers.
- Reformed parking policies can increase fairness, so that, for example, people who use transit or walk do not have to pay higher prices or suffer reduced wages, due to parking.
- Methods to unbundle parking cost are inefficient, unless they support the spontaneous sharing of parking spaces. Shared parking, with unbundled cost, would ultimately allow the City to require significantly less parking.
- Typical current systems of timed parking and metered parking are far from ideal. Such parking has no automated record keeping, so it is difficult to know where there is too much or too little parking.

- Good policies will eventually let cities and the county turn parking minimums into parking maximums.

Less land and resources devoted to parking will support mixed use and make “smart growth” more economically viable.

Here is the abstract of Reference 4.

The *Introduction* shows documented driving reductions due to the pricing of parking. It notes that although the benefits of priced and shared parking are known, such parking has not been widely implemented, due to various concerns. It states that a solution, called “*Intelligent Parking*,” will overcome some of these concerns, because it is easy to use and naturally transparent. It asserts that this description will support a “Request for Proposal” (RFP) process. Eight background information items are provided, including how priced parking would help California achieve greenhouse gas reduction targets. A story demonstrates some of the key features of *Intelligent Parking*. Arguments for less parking, shared parking, and priced parking are made. Barriers to progress are identified. The fair pricing of parking is described. New ways to characterize transportation demand management are presented. Seven goals of *Intelligent Parking* are listed. Eleven definitions and concepts, that together define *Intelligent Parking*, are described. This includes a method to compute a baseline price of parking and how to adjust that price instantaneously to keep the vacancy above 15% (“Congestion Pricing”). An implementation strategy is described.

This abstract aroused enough interest among those responsible for A&WMA’s *Sustainable Land Use and Parking* session that they requested a manuscript, which was ultimately selected to become part of the written Conference Proceedings and for presentation. We hope that it will similarly arouse the interest of the Mayor, City Council, and staff. The City should work to help execute the implementation strategy described in Reference 4.

The City could also play a pivotal role by helping to find a demonstration project, probably at a school or an office. Reference 5 gives the specifics on how this could be done. Reference 4 describes an implementation strategy in its Implementation Section, on Page 16. The City has the authority, in its off-street parking ordinances, to require cooperation with an agency implementing unbundling and this would be the correct action, after a sufficient number of successful demonstrations have been achieved. “Successful” would need to mean that nearly all stakeholders would be pleased with the program.

If fully implemented, this strategy, by itself, would probably decrease driving throughout the City by between 15% and 25%. This is shown in Reference 4’s Table 1.

Here is an email indicating that the basic features of enforcement, charging, distributing earnings, and sending out monthly statements would not be difficult.

Email Showing that the Basic Required Technology Could Be Easily Developed

----- Original Message -----

From: [David Carta](#)

To: ['Lisa Rodman'](#) ; ['Mark Tanner'](#) ; ['Kelli'](#) ; ['Nicole'](#) ; ['Mark S.'](#) ; ['John'](#)

Cc: ['Mike Bullock'](#)

Sent: Wednesday, January 13, 2010 5:40 PM

Subject: RE: RFID_ParkingNewCalsbadHS

[Dear Carlsbad School Board,](#)

I wanted to send a quick note discussing the technical feasibility of tracking cars into a lot without impacting students or requiring the need for gates. Mike Bullock and I have discussed this project; it can be accomplished straightforwardly by utilizing Radio Frequency Identification and/or Video Cameras integrated with automated license recognition systems. The cars would need to register with the system at the start, but it would be fairly painless for the users after the initial installation. The back end database system can also be implemented both straightforwardly and at a reasonable price.

This is not necessarily a recommendation of the proposal for unbundled parking. Rather it is strictly an unbiased view of the technical feasibility of the proposal to easily and unobtrusively track cars, both registered and unregistered, into a fixed lot.

Best regards,

David R. Carta, PhD
CEO Telaeris Inc.
858-449-3454

6.6 Unbundling the Costs of Driving

6.6.1 Introduction

This measure would require a state and/or federal government action. Therefore, like advocating for cleaner cars, the role of the City would be to understand the value and then advocate for this measure, at the state and federal level. SANDAG could help.

“Unbundling”, in the heading above, denotes that the money collected should be paid out to those that are losing money under the current system. This means, for example, that the money collected to account for increased health-care costs, caused by the air pollution the public must breathe, would go to reduce the cost of health care, not to build or even maintain roads.

6.6.2 A Comprehensive Road-Use-Fee Pricing System To Unbundle the Cost of Driving

Abstract This section contains a listing of road pricing principles. It provides an example of a road-use fee structure that supports the listed principles. Useful background information is provided. Arguments in favor of the presented example are presented.

Initial Note For many reasons, including the climate crisis, a comprehensive road-use fee pricing system is needed. It would be optimal for the state to implement the type of system described in this section. However, the state has a long history of irresponsibility in pricing road use. It is hoped that global warming will change this. Certainly, all the MPO’s in the state should be urging our state government to wake up and take action. If these efforts fail, the MPO’s will have to proceed as best they can to implement as much of these road-use pricing system components as possible.

6.6.2.1 Road-Use Fee Principles

1. The first principle is that of “full-cost pricing”. Driving has enjoyed a favored status in this state and in this country, resulting in sprawl, health-damaging pollution, global warming emissions, and congestion. We should advocate for the elimination of that favoritism in California, primarily by adopting this first principle.

2. Secondly, the current economic rewards for good mileage vehicles must not be eroded. Due to global warming, motorists need to “go electric” as soon as possible.

3. In addition, road-wear factors (primarily weight), the noise generated, and the pollution generated by each individual vehicle must be taken into account. This will increase fairness and support a shift to lighter, cleaner, and quieter vehicles.
4. The time and place of travel must be incorporated to reduce congestion.
5. Any road-use fee structure must do no economic harm to low-income drivers.
6. As road-use fee technologies evolve, privacy must be protected at each step.

An Example of a Conforming Road-Use Fee Structure

Condition 1

100% of the funding for all of the expenses of public roads, *excluding* those costs associated with future expansion (covered in Condition 3), comes from a road-use fee (that may include a fuel excise tax), that ultimately (as affordable technology can support) would contain the following **Features**:

Feature 1: a VMT Fee A base, per-mile (VMT) component fee paid by all motorized vehicles for road construction and maintenance. It would vary by model so that the incentive to drive efficient vehicles is at least as large as for our current fuel excise tax. This means that a Prius would be much cheaper, per mile, than a Hummer.

Feature 2: a Carbon Fee An additional per-mile carbon component part is computed using an effective fee per gallon that is equal or larger than the fuel tax that this per-mile carbon fee might replace, to correlate with the amount of CO₂ emitted. This could either be charged at the pump, as it is now done, or could be added to the VMT fee by using a price per mile computed by dividing the effective price per gallon by the charged vehicle's (year and model) average mileage, in the units of mile per gallon.

Feature 3: a Road Wear Fee An additional per-mile component part that is proportional to the vehicle's (year and model) average weight, or other road-wear variable of the vehicle being charged.

Feature 4: an Air Pollution Fee An additional per-mile component part proportional to the charged vehicle's (year and model) average pollution level, to be used to compensate people, schools, businesses, governments, and corporations harmed by pollution, with this rate set for full compensation.

Feature 5: a Noise Pollution Fee An additional per-mile component part proportional to the average noise pollution level of the charged vehicle, to compensate people, schools, businesses, governments, and corporations harmed by noise pollution, with the rate set for full compensation.

Feature 6: a Congestion Fee An additional per-mile component part or, alternatively a multiplier, to account for either time and place, or instantaneous traffic flow rate, to reduce or eliminate congestion, with the proceeds of this fee (collection minus collection cost) used for either the expansion or the operation of transit systems that would tend to reduce this congestion.

Feature 7: Low Income Relief A fractional multiplier that would reduce the total per-mile cost for drivers with a sufficiently low income and a sufficiently high need to drive, but only available for a period of calendar time sufficient for the driver to change their circumstance creating the need to drive, unless this is impossible. Item 7 of 6.6.2.3 has more detail.

Feature 8: Privacy Privacy protections so that where and when people drive, the vehicle they drive, and any Feature 7 advantage, is fully protected, unless a warrant is issued by a judge in response to substantiated allegations of a serious, felony crime.

Condition 2

The per-mile charges of Condition 1 must be large enough to fund yearly payments to the municipalities having large, limited access roads (AKA “freeways”) within their boundaries (thereby keeping land off of their property-tax rolls), with these yearly payments equal to the average yearly property tax per acre of the adjacent land, multiplied by the total acreage covered by the road’s right of way, including frontage roads.

Condition 3

No expansion of the system of public roads should be done unless market research and traffic modeling show that the net revenue of the proposed road or additional lanes will fund all the expenses identified in Conditions 1 and 2.

Condition 4

No expansion of the system of public roads should be done unless it is shown that the expansion will not negatively impact the state’s AB32 and S-3-05 goals and responsibilities.

Condition 5

The sales tax on gasoline and diesel fuel should remain. Its revenue can be used as is the revenue from any other sales tax that is collected on consumer items.

6.6.2.2 Background Material

This section provides information about the current level of the fuel tax, the difficulty of raising the fuel tax, the use of the fuel sales tax, lane performance during times of high demand, demand under the condition of “full cost pricing”, political “push back” to full cost pricing, other opinions that a pure fuel tax is becoming obsolete, and finally, information indicating that a road-use fee could be raised by a simple majority in the state legislature.

1. Current Level of Fuel Excise Tax

A full accounting of the fuel excise tax and what it currently pays for is not our responsibility. A significant segment of the population probably believes that current fuel tax rates are high enough. However, a San Diego County newspaper, the North County Times (NCT), in a February 9, 2009 article, reported that the Chair of the California Transportation Commission (CTC) recently wrote that the fuel tax currently contributes nothing to road construction **and only provides half of the money needed annually for repairs:**

<http://www.nctimes.com/articles/2009/02/09/news/columnists/downey/z8591536f3e7332da882575510076fa1e.txt>

Increasing the state gas and diesel taxes, unchanged at 18-cents per gallon since 1994 – when the final one-cent increase mandated by Proposition 111 (June, 1990 that doubled the nine-cent excise fuel tax over a 5-year period) was added, is long overdue.

2. The Difficulty of Raising the Fuel Tax

To raise the fuel tax would require a 2/3rd majority vote of the legislature. In addition, according to a CNN report, <http://www.cnn.com/2009/POLITICS/02/20/driving.tax/>

“Officials including [Secretary of Transportation] LaHood have opposed raising the national gas tax, particularly in the current recession, and have said a new system is needed.”

3. Use of the Fuel Sales Tax

California has a sales tax on all consumer items sold in the state, except food and medicine. The revenues from sales taxes are generally placed in our state’s general fund. However, an exception to the general rule has been made for the sales tax on gasoline and diesel. By the conditions of a successful ballot measure, the sales tax on fuel must be used to support roads, which supplements the excise tax on fuel (also known as the “gas tax”), allowing the excise tax to be lower than necessary.

4. Lane Performance When There Is High Demand

From the DOT’s Freeway Management and Operations Handbook:

http://ops.fhwa.dot.gov/freewaymgmt/publications/frwy_mgmt_handbook/fmoh_complete_all.pdf, Page 1-18, comes the following:

As flow increases from zero, density also increases, since more vehicles are on the roadway. When this happens, speed declines because of the interaction of vehicles. This decline is negligible at low and medium densities and flow rates. As the density further increases, these generalized curves suggest that speed decreases significantly just before capacity is achieved, with capacity being defined as the product of density and speed resulting in the maximum flow rate. This condition is shown as optimum speed “ S_o ” (often called critical speed), optimum density “ D_o ” (sometimes referred to as critical density), and maximum flow “ V_m ”. (7). In general, this maximum flow (i.e. capacity) occurs at a speed between 35 and 50 mph.

Efficient freeway operation depends on the balance between capacity and demand. In the simplest terms, highway congestion results when traffic demand approaches or exceeds the available capacity of the highway system. As vehicle demand approaches highway capacity, traffic flow begins to deteriorate. Flow is interrupted by spots of turbulence and shock waves, which disrupt efficiency. Then, traffic flow begins to break down rapidly, followed by further deterioration of operational efficiency.

Therefore, when demand is allowed to significantly exceed capacity, the flow rate drops well below optimum. In fact, speed can drop to nearly zero. With no intervention, freeway lanes can be counted on to fail, just when they are needed the most.

5. Demand, Under the Condition of “Full-Cost” Pricing

The price-setting stipulations of “An Example of a Conforming Road-Use Fee Structure”, Features 1 through 6 of Condition 1, in conjunction with Condition 2, could be described as “full cost pricing”. It is not our responsibility to do an analysis to calculate what the average price per mile would need to be or to then determine how much driving would be reduced in reaction to this price. It could be that driving would decrease so much that congestion would disappear and the new problem would be to figure out what to do with the excess land buried under unneeded highway lanes and how to meet the large new demand for transit.

6. Political Pushback to the Notion of Full-Cost Pricing

There are many, well-funded “think tanks” and political figures and institutions that argue against raising the cost of driving. So far they have been largely successful in keeping the taxes on driving low.

7. Other Opinions That a Pure Fuel Tax Is Becoming Obsolete

There are many indications that more decision makers are adopting the view that the fuel tax either needs to be replaced or supplemented. The following examples are presented, with the first three being taken from the same NCT article identified in Item 1 of this Section (6.6.2.2).

First the Chair of the CTC pointed out that, "People are driving more-fuel-efficient cars and ones that run on alternative fuels and buying less gas. As a result, they are paying less in gas taxes". The author of the NCT article states that the CTC Chair and others are calling for "phasing out the gas tax," in favor of a VMT fee.

Second, Will Kempton, director of the California Department of Transportation, told local officials in Valley Center recently "we need to make a transition to a new way of collecting transportation funds." Kempton also said the state should consider following the lead of Oregon, which is exploring a tax based on the number of miles a person drives.

Third, Jim Earp, a California Transportation Commission member from Roseville, added, "Either that or we're going to have to jack up the gas tax considerably."

Fourth, the Christian Science Monitor editorial, February 27, 2009, "A road map to better US roads," says, "Congress should heed a panel that suggests replacing a tax on gas with one on miles driven."

<http://www.csmonitor.com/2009/0227/p08s01-comv.html> It goes on to say, "In Europe, the Netherlands will transition to a VMT (fee) by 2014 and Denmark by 2016. Changing behavior is the key to 21st century transport that must unclog crowded highways and reduce dependence on fossil fuels. Taxing miles alerts drivers to the real cost of using roads and can better motivate them to drive less. A VMT (fee) is the more reliable and efficient way to pay for transport. Its time has come."

Finally, according to a CNN report, <http://www.cnn.com/2009/POLITICS/02/20/driving.tax/>, Speaking to The Associated Press, Transportation Secretary LaHood, an Illinois Republican, said, "We should look at the vehicular miles program where people are actually clocked on the number of miles that they traveled."

8. Raising a Road-Use Fee Could Be Done By a Simple Majority

The Sacramento Bee printed an article by Dan Walters, on January 20th, 2009, describing a proposal to help close California's budget gap.

<http://www.nctimes.com/articles/2009/01/20/opinion/walters/zd5e9d64561b6efd78825753e006c951a.tx>.

The key elements from the article are as follows.

- 1.) Senate President Pro Tem Darrell Steinberg insists that it's legal, basing that assertion on a 5-year-old opinion from the Legislature's legal office.
- 2.) The plan would eliminate excise and sales taxes on gasoline and raise other taxes to help close the budget deficit, then "backfill" the gasoline taxes with a new "fee" that would actually increase the bite on motorists by 50 percent, from 26 cents a gallon to 39 cents. **A "fee" can be imposed by a simple majority vote as long as it relates to actual services rendered by government.**

Note that this fee approach is relatively far from meeting all of the stipulations of this letter. However, it would represent significant progress.

6.6.2.3 Arguments in Favor of Road Use Fees

This Section provides an analogy demonstrating why roads should be operated for the equal benefit of all. It presents some of the consequences of the current level of our state fuel tax. It argues that a road-use fee should include a vehicle miles traveled (VMT) component and that furthermore, a component should relate to congestion pricing (i.e. needs to account for *specific* time and place of travel). It argues that a road-use fee should account for environmental impacts, should protect low-income families, and contain privacy protections. It explains why revenue from a road use fee should be used to pay an effective property tax to municipalities. It argues that these methods would help to alleviate the state's budget problems. It states that it is easier to discuss setting a road use fee than it is to discuss increasing an excise tax on fuel. Finally, it briefly discusses some of the emerging technologies and the relationship between technology and this resolution.

1. Full-Cost Pricing

Roads should be priced so that they are no longer an economic burden on those that choose to drive less than average. Yet, it is hard to be objective about roads. Here's an analogy. Assume that California owned a large number of 2-bedroom apartments that it allowed families to live in if they paid a tax of \$500 a month, even though the market rental value of the apartments was \$1000 a month. Clearly, the people living in the apartments are the winners and all the other citizens of California are the losers, because if the state set the price to the market value, it would have additional money that it could either use for the benefit of all citizens or it could return the money to everyone as a tax rebate. Some might note that since there are a large number of these apartments, almost everyone that wants one could get one, so those that don't live in these 2-bedroom apartments are losing out because of their own poor choice. However, since not every citizen wants to live in these apartments, the State's practice is indefensible. The correct thing for the state to do would be to allow low-income citizens to remain in the rental units at the subsidized price of \$500 a month, stop calling the price-per-month a "tax" and instead call the price-per-month a "user fee", and set the price for the families that are not low income to the market value of \$1000 per month. In this case, the low-income families remain winners. Even though all the others are losers, they are losing much less than before. This assumes that the state takes the additional earnings and uses it in a way that benefits all citizens. Buying more 2-bedroom apartments would not qualify. This analogy's original operation is similar to what California does by under pricing road use fees, as described below.

2. Consequences of the Current Level of Fuel Tax

a. Economic Inequity

Because our state fuel tax is too low, funds derived from taxes (and fees) that are not related to the choice of driving a car must be used to support our system of public roads. Examples are our sales tax, our income tax, our property tax, and the development fees that increase many of our costs. In effect what is happening is that money is systematically *being taken* from those that drive less and *being given* to support those that drive more.

This violates a fundamental principle of our free market system. People should pay for what they use and, conversely, people should not be forced to pay for what they do not use. It is true that we often willingly violate this principle, for some higher purpose. Education, mass transit, and Section 8 housing are good examples. However, there is no valid reason to

increase driving by making it artificially cheap to drive, or for that matter, to park a car. The facts about global warming suggest quite the opposite.

b. Global Warming Threat and the California Example of Road-Use Pricing

From <http://www.sandiego.edu/EPIC/ghginventory/GHG-On-Road1.pdf.pdf>, we learn that in San Diego County, emissions from on-road vehicles are about 46% of regional GHG emissions. Many world leaders know that many of our citizens have taken all of the time and cost variables into account and then built their life around their automobiles. How can we expect the world to do its part to reduce GHG emissions, if they see us unwilling to reform the way we price the use of roads, so as to conform to the basic free-market principles that we claim to hold dear?

c. Other Pollution

Besides GHG emissions it is well known that on-road transportation contributes significantly (around 50% by some accounts) to our air and noise pollution. Cars cause air and water pollution directly and indirectly. This occurs when they are manufactured, when their fuel is transported and refined (refineries are, by far, the biggest cause of ground-water contamination in California), and when they are driven.

d. Urban Sprawl

The dominance of the automobile is the primary reason for our sprawling, urban land-use patterns. For example, it is well known that a simple 4-lane freeway, with frontage roads, can consume 26 acres per mile. An acre of land can only park 117 cars. Sprawl has taken valuable farm land, wet lands, and wild-life habitat. It makes it more difficult to walk or to bicycle. It also makes it more difficult to provide or to use transit.

e. Summary Statement

GHG emissions, urban sprawl and air, water, and noise pollution are made worse by making driving seem artificially inexpensive to the public. Note that for every penny earned by raising the price per mile to drive to its correct value, a penny could be cut from other taxes and fees that are unrelated to driving. Secretary of Transportation Ray LaHood's statement ("we can't raise the gas tax in a recession") shows that he misses this important point. This point has been made by the Sierra Club, as shown in <http://www.sierraclub.org/policy/conservation/trans.aspx>, where it says, of subsidies to driving, "These subsidies should be publicly scrutinized and eliminated by appropriate fuel and carbon taxes, parking and road user charges, . . ."

3. The Use of the Gasoline Sales Tax

As stated in Section III. 3, currently the *sales* tax on fuel must be used for the same purposes as the *excise* tax on fuel. This is contrary to the normal rule for sales taxes, whereby sales taxes are used for general-fund purposes, unrelated to the item sold. For example, the sales taxes from running shoes are not removed from the general fund to be used to build running facilities. Likewise, the sales tax on alcoholic beverages is not separated out to be used to subsidize the building of more drinking establishments. If we are going to end our unfortunate favoritism towards roads, we need to end the practice of using the sales tax from gasoline as if it were an additional fuel excise tax. This practice would be ended if the implied recommendations of this report were enacted. The sales tax on gasoline should continue, but the tax on the sale of gasoline should go to the general fund, as does the tax on the sale of other consumer items.

4. Reasons to Adopt a VMT Based, Road-Use Fee

From a Global Warming perspective, there is a hierarchy of favored personal transportation modes.

- Mode 0: Telecommuting (no need to leave the house)
- Mode 1: Walking
- Mode 2: Cycling (skate boarding and any other device-aided, non-motorized transportation mode)
- Mode 3: Electric bikes and scooters
- Mode 4: Transit
- Mode 5: Electric cars or cars that get great mileage
- Mode 6: Other cars

In terms of reducing pressure to expand road capacity, Modes 0, 1, 2, and 3 are many times more desirable than even Mode 4, which is many times better than Mode 5. The point here is that as much as we want to see more electric cars and more cars that get exceptionally high mileage, we should not lose sight of the fact that unless all road users pay their fair share, those people using Modes 0, 1, 2, 4, and 4 are not being fully rewarded for not using road capacity, and this is poor environmental policy, based on the desirability factors shown. All cars are large, manufactured devices with a finite life. They promote sprawl. People that routinely use Modes 0 through 4 have often set up their lives so that they could drive less. Those life-style choices need to be fully rewarded.

5. Reasons to Adopt Road-Use Pricing Methods Tied to *Specific* VMT

a. Need to Support Condition 1's Feature 6

The current fuel tax is simple and, in theory it could be raised to cover the costs of driving, for those vehicles that use fuel. Alternatively, it is easy to imagine odometers that transmit their values at scheduled times to a billing computer. With vehicle-recognition schemes, implemented at the pump or within the billing computer containing odometer data, it would be possible to expand these simple methods to support Section 6.6.2.1's Features 1 through 5, Feature 7, and Feature 8. However, these simple methods would not support congestion pricing, Feature 6. Feature 6 is sufficiently important that it must be identified and supported.

b. Value of (Condition 1's Feature 6) Congestion Pricing

Various names have been proposed for Section 6.6.2.1's Feature 6, including "congestion pricing" or "convenience pricing". Regardless of the name, it is a powerful way to reduce our society's propensity for expanding highways. Proponents of freeway expansion frequently mention the fact that highway "gridlock" harms our public safety because it can significantly delay emergency vehicles. Individuals in society see this in personal terms. We can all imagine a need to get home to attend to a child, or to get to an emergency room. The consequences of congestion can go well beyond being just a frustrating inconvenience. Sometimes people feel that they would pay almost anything to be able to drive at higher speeds. How many people have missed a plane, or a train, or a critical business meeting, "stuck in traffic"? Besides this, lanes also often support transit. Transit success requires dependable and reasonably fast bus travel. In addition, stop and go traffic wastes fuel, increases GHG, and increases unhealthy emissions.

"Convenience Lanes" could provide an option for drivers when they feel it is worth the extra money to drive beyond congestion speeds. This pricing also provides a means to keep one or more lanes operating close to their theoretical capacity, instead of at the greatly reduced flow

rate that comes when demand is large. The pricing can adjust automatically to keep demand below capacity, on one or more lanes. This means that congestion in parallel lanes will clear sooner than if all lanes were allowed to stay severely congested.

“Convenience Lanes” also offer the hope of significant revenue generation, if enough people are willing to, in effect, bid up the price. (This will probably happen if the price of driving is kept low enough in regular lanes that there are still times and places where congestion is significant.) Feature 6 would require that proceeds (collection minus collection costs) be used for transit systems that would tend to reduce the congestion. The lanes and roads that are parallel to the “convenience priced” lanes can be counted on to fail to carry their capacity when serious congestion strikes. Fortunately, there is no comparable effect for transit. Although it is conceivable that transit demand could exceed transit carrying capacity, when this happens, the transit can be counted on to continue to carry its full capacity.

c. Condition 1’s Feature 6 and Road Price Variability

Some roads are relatively expensive to build; others are relatively inexpensive. There is no reason we have to settle for charging the same per-mile price for all roads. Similarly, driving at different times should be priced differently. It is well understood that freeways are sized and expanded to facilitate peak driving times. Since it is more costly to provide the added capacity needed at peak times, it is reasonable to charge peak-time drivers more. Charging more at the times that demand is high will tend to smooth out traffic demand over various times of the day.

d. Condition 1’s Feature 6 and Pollution

Feature 6 can reduce congestion. This is important because stop-and-go traffic emits more pollution and GHG emissions than lanes operating at “optimum speed” as identified above.

e. Condition 1’s Feature 6 Supported by the California Transportation Commission (CTC)

These powerful arguments have evidently been recognized by the CTC. In their *Addendum to the 2007 Regional Transportation Plan Guidelines, Addressing Climate Change and Greenhouse Gas Emissions During the RTP Process*, adopted on May 29, 2008, they provide strong support to lane pricing.

http://www.catc.ca.gov/programs/rtp/Adopted_Addendum_2007_RTP_Guidelines.pdf,

In the CTC’s Pricing Strategies Section (Page 3), the CTC instructs Metropolitan Planning Organizations to “model adding pricing **to existing lanes**, not just as a means for additional expansion. **Variable/congestion pricing should be considered.**”

Variable/congestion pricing cannot be done without Section II’s Feature 6 of its Condition 1.

f. Arguments to Support Road-Pricing Guidelines

There is widespread confusion regarding who owns existing lanes and what promises were made. Converting existing, “free” lanes to be lanes that are priced can be justified by explaining that fuel taxes have always been road-use fees and that any stated or implied promise that paying fuel tax entitled drivers, for all time forward, to drive free on the roads that the fuel taxes may have been used to fund was specious. Specifically, the claim that drivers “already paid” for roads through the payment of fuel taxes is incorrect because (i) many drivers have just started driving; (ii) many drivers that paid fuel tax for many years have died; and (iii) paying a fee to use a public road is no different than paying rent to use property and paying rent does not lead to quasi ownership. These same arguments can be used against

statements supporting the idea that drivers can forever drive free over a bridge because the tolls have paid off the loan for the bridge.

6. Reasons for Condition 1's Features 2 – 5

These features charge vehicles for their environmental impacts.

7. Reasons for Condition 1's Feature 7

The ability of low-income families to be able to drive to work and other essential family errands must be protected. However, given our challenge of global warming, this needs to be “constructive charity”. The features shown in Section 6.6.2.1 suggest that a billing computer will probably be involved. If so, that computer's database can, perhaps at the individual's discretion, be supported with information such as current housing details, current salary, job location, occupation and job skills to include a full resume, childcare, location of family and friends, hobbies, or recreational pursuits, and other items that could be related to the individual's current need to drive. When the software determines that the person qualifies for a reduced multiplier of the full cost of driving (a subsidy), it could then also run various programs to offer, in creative, tailored, form letters, suggestions for changing circumstances to reduce driving. This could involve a search for jobs, a search for suitable housing, a search for daycare, and a search for better locations to pursue hobbies or recreation. The availability of transit would be considered in the software and would be offered. Job training could be suggested or offered at a discount. If circumstances support it, the person could also be asked if they would be interested in a class on riding a bicycle in traffic (Traffic Skills 101, taught by League-of-American-Bicyclist-certified instructors). Taking such a class could earn the person a financial award, perhaps to include a new or used bicycle. The software would put a high priority on helping the person achieve a lifestyle that requires less driving. As a last resort the software would take into account the congestion level of various routes and offer a driving route that requires a reduced subsidy.

8. Reasons for Condition 1's Feature 8

Privacy must be protected, unless confidential disclosure to law enforcement agencies is ordered by a judge based on reasonable cause. We currently rely on laws and judges to protect our privacy regarding what we say on the telephone, our emails, our internet activities, and the information we provide on our tax forms. This information could be both politically revealing and highly embarrassing, to the point where it could seriously degrade our personal and professional lives. In terms of protecting our democracy, it is especially important that our political activities be protected. Where we drive and park a car is also somewhat sensitive in this regard. However, in most cases it is less sensitive than our emails and what we say on the phone. Cell phone companies already have information about our travel. Many locations, such as Dallas, have “toll-tags” that record every time someone goes through a toll plaza and charges them accordingly. The conclusion is that the argument that many people will never accept a computer, with built in privacy protections, from having information about where we drive is overblown and not supported by the facts.

9. Reasons for Condition 2

Railroads pay property tax on the land under their tracks. Utility companies pay property taxes on the land under their transmission lines. There is no reason that large highways should not pay a property tax for the land they take off the tax rolls in each community. The favored status of roads should be eliminated.

10. California's Budget Problem

California currently has a large budget gap. Children may lose their health care and education cuts may be severe. Many state funding programs for transit may be cut. This strategy might help to reduce some of these cuts.

11. Raising the Fuel Tax vs. Pricing a Road-Use Fee

There are advantages in reframing the question from should we raise the fuel tax to: Should we replace the fuel tax with a road-use fee and, if so, how should we set the price of the road-use fee? Item 2 of Section 6.6.2.2, *Background Material*, above showed that a 2/3rds vote is needed in the state legislature to raise a tax; while, as shown in Item 8 of Section 6.6.2.2, *Background Material*, above, only a simple majority is needed to set and then raise a user fee. Besides this, there are a lot of common misunderstandings about our fuel taxes. Many think they are a mechanism whereby drivers somehow buy new roads. This confusion was discussed in detail in Item 1 of Section 6.6.2.3, *Arguments in Favor of Road-Use Fees*. If we can move the discussion to one of how to properly set the price of road use, we will have already made large gains in framing the question to the advantage of environmentalists, climate realists, and everyone that recognizes that it is time to stop favoring driving.

12. Technology

It is not the City's responsibility to pick the technologies that will ultimately be used in the implementation of the road-use pricing described. Email and phone conversations with employees of *Skymeter*", <http://www.grushhour.blogspot.com/>, indicate that they were ready to respond to a Request For Proposal (RFP) to implement VMT pricing in the Netherlands, to include every road in the country. Their proposal would have been that each car would have a GPS unit, about as large as an eye-glasses case, sitting on the dash. It would contain a database of roads and a variable set of pricing coefficients. The GPS software would determine the car's location with sufficient accuracy so as to support software computing a running tabulation of charges, as the car is driven. *Skymeter* officials state that the final challenge was to design the software so that the unit would function when the car was being driven in the presence of GPS reflections, such as in city "canyons" which is to say around multiple large buildings. They have solved this problem with additional algorithms and have demonstrated this in the most severe conditions they could find. However, they don't want to have to distinguish between lanes, suggesting that congestion pricing on large multi-lane roads, where pricing varies between parallel lanes, may require a Radio Frequency Identification (RFID) overlay pricing scheme, such as is currently used for "toll tags."

There are probably several, perhaps even many, ways to accomplish road-use pricing that has the features described in this Section. For example, license plate recognition is now probably inexpensive and reliable, since it is often used at stop lights.

6.7 Conclusions of Section 6, Transportation Strategies to Support Stabilization

In Section 2.4.4 of this letter, it was computed that, for the cars-and-light-duty-truck sector to support stabilization, the per-capita driving reductions, with respect to 2005 levels, here in San Diego County, would have to be at least 35.1%. The best strategies to reduce VMT are summarized here, with the estimated driving reductions (per-capita, with respect to 2005 levels) for each one shown in square brackets:

- 1.) Comprehensive (equitable and environmentally sound) road use fee pricing system, as could be installed by *Skymeter*; [15%]
- 2.) Unbundling the cost of car parking; [15%] (This estimate is based on Table 1 of Reference 4.)

- 3.) Good bicycle projects and bicycle education; [5%,]
- 4.) Stopping all freeway expansions and reconfiguring TRANSNET to be 67% for transit and 33% for road maintenance [10%]

These strategies could be implemented by 2020, not 2035, and would decrease per capita driving by a sum of at least 45% (15+15+5+10). However, Item 4 would take time because the additional transit might not be built by 2020. The strategies to do this are primarily those that increase fairness for all, especially families that drive less than average. Item 2 could be done by San Diego alone. Items 3 and 4 would require SANDAG cooperation. Item 1 would require state implementation. Since San Diego controls 40 of SANDAG's 100 weighted votes, the City could control SANDAG actions, if the City could get other cities to see the need for climate stabilization. For example, San Diego with 40 votes, Chula Vista with 8 votes, and La Mesa, with 2 votes, could block any action by SANDAG. SANDAG could go from being a climate-killing organization to a climate-saving organization. SANDAG could also influence our state government to stop ignoring our need for a road-use fee. Other MPOs would join SANDAG, since all MPOs and all California cities need to develop plans to grow and yet achieve a GHG emission trajectory out to 2035 and beyond that will support climate stabilization.

7.0 Conclusions & Questions

If this C-MAP is changed so that it adopts a plan of enforceable, feasible mitigations and thus develops an enforceable plan that supports climate stabilization beyond year 2035, it can avoid the necessity of an EIR process under CEQA. However, the current proposal contributes significantly to climate destabilization and ignores feasible mitigations. Therefore adopting this "project" requires an EIR process, under CEQA. After reading and considering the supporting comments of this letter, do you agree with these conclusions? If not, why?

Section 1 of this letter identifies climate information that must be included in any C-MAP so that readers clearly see the challenge and danger of our climate crisis. After reading and considering the supporting comments of this letter, do you agree with this conclusion? If not, why?

This letter computes that per-capita driving must be reduced by 35.1% by 2035, compared to 2005 levels. The corresponding *net* driving reduction is 15%. After reading and considering the supporting comments of this letter, do you agree with these conclusions? If not, why?

The current plan has little or no enforceable reductions and only shows a set of expected and proposed reductions that total 6,762,829 MT CO₂e, even though a reduction of 11,033,225 MT CO₂e is needed to support climate stabilization. (This is shown in Section 4.1 of this letter, with the calculations based on Table 3.2 and Figure 3.7 of the C-MAP.) After reading and considering the supporting comments of this letter, do you agree with these conclusions? If not, why?

Although a strong parking policy strategy is needed, the current C-MAP proposal (C-MAP Table 4-3) is weak and invites strong criticism. A winning strategy is proposed in this letter. After reading and considering the supporting comments of this letter, do you agree with these conclusions? If not, why?

Section 5 of this letter contains strong energy proposals to improve the proposed C-MAP. After reading and considering the supporting comments of Section 5, do you agree with this conclusion? If not, why? Please answer this for each of the 4 recommendations in Section 5 of this letter.

Section 6 shows a set of transportation strategies that would achieve support for climate stabilization. Some of them are difficult, but they are all feasible if the City pursues them aggressively. After reading and considering the supporting comments of this letter, do you agree with these conclusions? If not, why?

Respectfully submitted,



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References

Note: References 2 and 5 were attached in the email sent to the City that contained this letter. The other references can be viewed at the links shown.

- 1.) Letter from *Center for Biological Diversity*, to Elaine Chang, Deputy Executive Officer of Planning, Rule Development, and Area Sources of the South Coast Air Quality Management District; *Comments on Survey of CEQA Documents on Greenhouse Gas Emissions Draft Work Plan and Development of GHG Threshold of Significance for Residential and Commercial Projects*; April 15, 2009.
<http://www.aqmd.gov/ceqa/handbook/GHG/2009/april22mtg/CBDcomments.pdf>.
- 2.) Letter, Sierra Club Transportation Chair to SANDAG Board, *California Air Resources Board (CARB) Greenhouse Gas (GHG) Reduction Targets, Issued to SANDAG, in Accordance with SB 375, for the Year 2035*, April 20, 2011
- 3.) *Communities Tackle Global Warming, A Guide to California's SB 375*; Tom Adams, Amanda Eaken, and Ann Notthof; June 2009.
<http://www.nrdc.org/globalwarming/sb375/files/sb375.pdf>
- 4.) M. Bullock & J. Stewart, *A Plan to Efficiently and Conveniently Unbundle Car Parking Costs*; Paper 2010-A-554-AWMA, from the Air and Waste Management Association's 103rd Annual Conference and Exhibition; Calgary, Canada, June 21-24, 2010.
<http://www.sandiego.gov/environmental-services/pdf/sustainable/parkingcosts.pdf>
- 5) Letter, Bullock to the Honorable President Richard Holober and Members of the Board of Trustees, San Mateo County Community College District; *An Updated Parking Policy, in Light of the Controversy Surrounding the Removal of Building 20, Greenhouse, and Gardens, to Add Parking*; July 27, 2011

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**The San Diego Chapter of the Sierra Club is San Diego's oldest and largest grassroots environmental organization, founded in 1948. Encompassing San Diego and Imperial Counties, the San Diego Chapter seeks to preserve the special nature of the San Diego and Imperial Valley area through education, activism, and advocacy. The Chapter has over 11,000 members. The National Sierra Club has over 700,000 members in 65 Chapters in all 50 states, and Puerto Rico.**







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**Subject:** Comments Regarding the City of San Diego's Draft Climate Action

**Dear Mr. Schoenfisch and Ms. McPherson:**

I appreciate the opportunity to communicate with you concerning this important topic. As the Chair of the Chapter's Transportation Committee, I will primarily restrict my comments to climate and the required, climate-stabilizing reductions and how they can be achieved in the sector of regional and city-wide transportation. My background and the detailed, required mitigations are contained within Reference 1. All of the references should be considered part of this letter.

**The Draft CAP Target, Based on S-3-05, of 49% below the 2010 Emission Levels by 2035, Must Instead be 83% below the 2010 Emission Levels, by 2030 (not 3035).**

CEQA law requires that the negative impacts of failure be explained. In this case, failure is climate destabilization, where the positive feedbacks take over and all hope is lost. This would result in the probable loss of most, if not all, life on our planet. CEQA law also requires that the science-based remedy or mitigation set be clearly defined and planned, if feasible. Note that in this case, nothing is more infeasible than failure. Regarding our climate crisis, success is our only rational option. There have been many recent articles explaining that reductions much larger than the S-3-05 trajectory are now required. Reference 2 will be used here. What is needed can be determined by keying off the scientific truth shown on Page 20 of Reference 2 (emphasis added):

An abrupt cessation of all CO<sub>2</sub> emissions, whether in 2015 or 2030, is unrealistic, in part because industry, other business, and consumers alike need time to retool and reinvest in emission-free options to fossil fuels. Accordingly, Amici Scientists have proposed a glide path to secure an atmosphere whose CO<sub>2</sub> concentration is no higher than 350ppm. Their plan requires fossil fuel CO<sub>2</sub> emissions reductions of 6 percent annually, coupled with programs to limit and reverse land use emissions (i.e., massive reforestation). These actions could achieve the goal of restoring the atmosphere to approximately 350ppm within this century if the



plan were commenced without delay, and then adhered to. However, consistent with the abrupt phase out scenarios discussed in the prior paragraph *supra*, if the 6 percent annual emission reductions are delayed until 2030, then the global temperature will remain more than 1oC higher than preindustrial levels for nearly 300 years. Considered in another way, the required rate of emissions reduction would have been about 3.5% per year if reductions had started in 2005, while **the required rate of reduction, if commenced in 2020, will be approximately 15% per year**. Accordingly, the dominant factor is the date at which fossil fuel emissions phase-out begins.

The above words and Reference 2 in general means that S-3-05's 2050 target, of 80% below 1990 values, needs to be achieved in 2030. This can be computed as the 0.85 factor (from 15% per year) to the tenth power (10 years, from 2020 to 2030), which is 0.1968. Therefore the correct target, is not for year 2035, but is instead for year 2030. Finally, it must be computed as  $(0.85 \times .2) = .17$  or 87% below the 1990 value. The truth is that we need to adhere to the standards of AB 32, which is that we must maximize reductions by adopting all measures that are technically feasible and cost effective. All of the mitigations described in Reference 1 meet both of these simple criteria and so our job now is to implement them as soon as possible

#### **You Should Show How the Target of 49% Below 2010 Levels by 2035 Was Computed**

It is from the S-3-05 trajectory between the "1990-level-by-2020" target and the "80%-below-the-1990-level-by-2050" target. The 1990 value is said to be 15% below 2010. Therefore, for 2020, the factor 0.85 must be applied to the 2010 reference year. Since 2035 is half way between 2020 (in 2020, a factor of 1 applies, relative to the 1990 value) and 2050 (in 2050, a factor of 0.2 applies, relative to the 1990 value, since it is 80% down), the factor to get to 40% (halfway between 100% and 80%) below 1990 is 0.6. (Alternatively, 0.6 is halfway between 1.0 and 0.2.) Therefore the factor is computed as the product of 0.85 and .6 = .51, which is 49% down from 2010, as you show, on Page 3, in the "By the numbers" box.

#### **The Draft is Better Than Other Local CAPs**

I have worked on the climate action plans of San Diego County, our Port Authority, and the cities of San Marcos and Vista. They are all failures. According to a Superior Court Judge, the County CAP has no enforceable measures. I would say that if there are any enforceable measures in any of these CAPs (the Port's Board may have no intention of ever finalizing a CAP), they are far too little and far too late. Your draft CAP is better. It has a 2035 target that conforms to S-3-05. Five years ago, it might have been possible to argue that such a target was legally defensible.

The CAP also has some good comments regarding car-parking policy. The measures need to be improved, however. Still, they at least show a willingness to suggest a departure from Business As Usual (BAU). The Port's draft, which may never get completed, has about matched this effort, in offering parking-policy reform. The San Marcos and Vista CAPs have nothing more than the minimal-help suggestion of offering better parking places to Zero-Emission vehicles (ZEVs).

#### **Bring the Car-Parking Reform Measures Up to a Higher Level of Climate-Stabilization Support**

People, even people in government that should know better, often call bundled-cost parking "free". Parking is very expensive to provide. It is never free.



A very high percentage of the car-parking facilities in San Diego are operated as bundled-cost parking. This is especially true in the suburban areas of San Diego, where the per-capita vehicle-miles travelled (VMT) is higher than the city average. Besides this, implementing parking systems that unbundle the cost of parking need to start with a reduced set of features, compared to a full-featured system. It is unwise to suggest that good systems should not be implemented in the suburbs. If a factory in section of San Diego that had no transit at all were to unbundle the cost of its parking, there would be very little hardship on drivers, because most of the workers would continue driving. For example, if there were 100 workers and the charge was \$5 per day and only 2 employees biked to work and everyone else drove alone, the money to be divided among the 100 employees would be \$490 dollars per day. Each worker (this simplified example assumes everyone works the same number of hours per day) would earn \$4.90 per day. The two bicycle riders would net a plus \$4.90 per day. The drivers would net a loss of ten cents per day. Note that if the two unused parking spaces could be rented out to the general public, for \$5 per day, the drivers could break even. The authors of the Draft CAP seem to think that unbundling in the suburbs would not work. This is false, as the simple example shows.

Specifically, the following word changes are recommended

**IS:**

**3.3.3** Develop a Parking Plan by 2020 to include measures such as **unbundled parking for commercial and residential sectors** in urban areas, flexible parking pricing to reflect supply and demand in City neighborhoods.

**SHOULD BE:**

**3.3.3** Develop a Parking Reform Implementation Plan by 2015, to include methods to unbundle the cost of parking, first at schools and places of employment, but to extend into all parking, in both suburban and urban areas, by 2025. The first reduced-feature, demonstration projects, which would include automated, monthly pricing-and-payout statements, with net earnings or charge, should be implemented no later than 2017. By 2020, these reduced-feature systems should cover no less than 50% of all work-place parking that was previously bundled-cost parking. The system should eventually include instantaneous pricing to ensure availability; fully shared, anybody-can-park-anywhere parking availability with no or very infrequent time limits; GPS-system directions to the best parking at the desired price; accurate price estimations; mailed statement features that will protect privacy; and the capability to reduce price as need to protect low-income drivers and handicapped drivers. By 2025, 80% of all parking that would have been unbundled-cost parking in BAU in 2012, would be covered by these systems. Parking on the property of single-family homes, apartments up to 6 units, and all individually owned parking behind garage doors are exempt. All on-street parking is covered by this system. More detail can be seen for one such system at <http://www.sandiego.gov/environmental-services/pdf/sustainable/parkingcosts.pdf>.

**Bring Other Transportation Reform Measures Up to a Higher Level of Climate-Stabilization Support**

Note that in order to have cars and light-duty trucks (light-duty vehicles, LDVs) support climate stabilization, clean cars, clean fuels, and less driving are needed. The allocation of each method of reducing CO2 emissions needs to be made so the difficulty of getting sufficiently clean cars (CAFÉ standards) and fuels (Low Carbon Fuel Standards) will roughly equal the difficulty of getting the driving reduction needed. This problem was worked in



Reference 1 but it needs to be reconsidered given that cars are going to be much cleaner but the new 2030 target will still require a large reduction in driving. (I plan to report on my own findings this summer, at the Air and Waste Management Association's annual convention.

**IS:**

**3.2.1** Complete 5-Year Strategic Implementation Plan of the Bike Master Plan by 2015, including establishing implementation performance measures such as SANDAG bike counts, an evaluation of the number of network miles, green lanes, buffered bike lanes, number of bike racks installed, number of miles of lane diets, and the number of miles paved and restriped lanes.

**SHOULD BE:**

**3.2.1** Complete 5-Year Strategic Implementation Plan of the Bike Master Plan by 2015, including establishing implementation performance measures such as SANDAG bike counts, an evaluation of the number of network miles, green lanes, buffered bike lanes, number of bike racks installed, number of miles of lane diets, and the number of miles paved and restriped lanes. When spending money to increase the use of active transportation, measures should be ranked and implemented based on the criterion of estimated vehicle miles travelled (VMT) per dollar spent. For example, subsidizing the League of American Bicyclist classes on how to safely ride in traffic ("Traffic Skills 101") may be the best use of active-transportation funds being spent to reduce driving.

**IS:**

**3.2.3** Establish new priority ranking for prioritizing infrastructure improvements in high quality transit areas that will be integrated into Capital Improvement Priority Matrix, Community Development Block Grant opportunities and Public Facilities Financing Plans by 2015.

**SHOULD BE:**

**3.2.3** Establish new priority ranking for prioritizing infrastructure improvements in high quality transit areas that will be integrated into Capital Improvement Priority Matrix, Community Development Block Grant opportunities and Public Facilities Financing Plans by 2015. When spending money to improve so-called "smart growth", measures should be ranked and implemented based on the criterion of estimated vehicle miles travelled (VMT) per dollar spent. Therefore "smart" should be defined as "VMT reducing", as in "VMT-Reducing" Growth.

**IS:**

**3.4.1** By 2035, implement SANDAG measures to meet GHG reduction targets from passenger vehicles to comply with SB 375, including telecommuting, carpooling, vanpooling, buspooling, bottleneck relief, HOV/HOT lanes, and safe routes to school.

**SHOULD BE:**

**3.4.1** By 2020, start implementing the SANDAG measures and more, as needed, to meet GHG reduction targets from passenger vehicles to comply with SB 375, by bringing about modal-split shifts to telecommuting, carpooling, vanpooling, active transportation, and transit use. These measures need to include improved road-use pricing mechanisms. Here, "complying with SB 375" means achieving the driving reductions and clean-car and fuel standards required to get the LDV sector to support climate stabilization, regardless of what CARB and SANDAG might say.



## **Final Comments**

Other mitigations, which are described in detail in Reference 1, need to be implemented. It may also be useful to consider Reference 11, which is from a “boiler plate” we have developed to improve a CAP.

Respectfully submitted,



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## **References**

**Note: References 1, 2, 4, 7, and 8 were attached in the email sent to the City that contained this letter. The other references can be viewed at the links shown.**

- 1.) Letter from Sierra Club Transportation Chair to Linda Giannelli Pratt and Anna McPherson, regarding San Diego's C-MAP and Negative Declaration document for the C-Map, September 28, 2012, sent in an email on 9/29/2012 at 12:21 AM
- 2.) BRIEF OF SCIENTISTS AMICUS GROUP AS *AMICI CURIAE* IN SUPPORT OF PLAINTIFFS-APPELLANTS SEEKING REVERSAL, ALEC L., *et al.*, *Plaintiffs Appellants*, v. GINA McCARTHY, *et al.*, *Defendants – Appellees*, USCA Case #13-5192 Document #1465822 Filed: 11/12/2013 (Attached in the email containing this letter)
- 3.) Letter from *Center for Biological Diversity*, to Elaine Chang, Deputy Executive Officer of Planning, Rule Development, and Area Sources of the South Coast Air Quality Management District; *Comments on Survey of CEQA Documents on Greenhouse Gas Emissions Draft Work Plan and Development of GHG Threshold of Significance for Residential and Commercial Projects*; April 15, 2009.  
<http://www.aqmd.gov/ceqa/handbook/GHG/2009/april22mtg/CBDcomments.pdf>.
- 4.) Letter, Sierra Club Transportation Chair to SANDAG Board, *California Air Resources Board (CARB) Greenhouse Gas (GHG) Reduction Targets, Issued to SANDAG, in Accordance with SB 375, for the Year 2035*, April 20, 2011 (Attached in the email containing this letter)
- 5.) *Communities Tackle Global Warming, A Guide to California's SB 375*; Tom Adams, Amanda Eaken, and Ann Notthof; June 2009. <http://www.nrdc.org/globalwarming/sb375/files/sb375.pdf>
- 6.) M. Bullock & J. Stewart, *A Plan to Efficiently and Conveniently Unbundle Car Parking Costs*; Paper 2010-A-554-AWMA, from the Air and Waste Management Association's 103<sup>rd</sup> Annual Conference and Exhibition; Calgary, Canada, June 21-24, 2010.  
<http://www.sandiego.gov/environmental-services/pdf/sustainable/parkingcosts.pdf>
- 7) Letter, Bullock to the Honorable President Richard Holober and Members of the Board of Trustees, San Mateo County Community College District; *An Updated Parking Policy, in Light of the Controversy Surrounding the Removal of Building 20, Greenhouse, and Gardens, to Add Parking*; July 27, 2011 (Attached in the email containing this letter)



8.) *Ideas and Proposals for San Diego CAP Improvements*, December 12, 2013, based on a boiler-plate document, written by a group of San Diego Chapter activists who were working on multiple climate action plans. (Attached in the email containing this letter)

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The San Diego Chapter of the Sierra Club is San Diego's oldest and largest grassroots environmental organization, founded in 1948. Encompassing San Diego and Imperial Counties, the San Diego Chapter seeks to preserve the special nature of the San Diego and Imperial Valley area through education, activism, and advocacy. The Chapter has over 11,000 members. The National Sierra Club has over 700,000 members in 65 Chapters in all 50 states, and Puerto Rico.



A Plan to Efficiently and Conveniently Unbundle Car Parking Costs

Air and Waste Management Association Paper 2010-A-554-AWMA

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ABSTRACT

The *Introduction* shows documented driving reductions due to the pricing of parking. It notes that although the benefits of priced and shared parking are known, such parking has not been widely implemented, due to various concerns. It states that a solution, called “*Intelligent Parking*,” will overcome some of these concerns, because it is easy to use and naturally transparent. It asserts that this description will support a “Request for Proposal” (RFP) process. Eight background information items are provided, including how priced parking would help California achieve greenhouse gas reduction targets. A story demonstrates some of the key features of *Intelligent Parking*. Arguments for less parking, shared parking, and priced parking are made. Barriers to progress are identified. The fair pricing of parking is described. New ways to characterize transportation demand management are presented. Seven goals of *Intelligent Parking* are listed. Eleven definitions and concepts, that together define *Intelligent Parking*, are described. This includes a method to compute a baseline price of parking and how to adjust that price instantaneously to keep the vacancy above 15% (“Congestion Pricing”). An implementation strategy is described.

INTRODUCTION:

It has been well established that appropriately priced parking will significantly reduce driving¹. Most case studies presented in Table 1 are evaluations of the most general type of “car-parking cash-out”: *a program that pays employees extra money each time they get to work without driving*. They show that a price differential between using parking and not using parking will significantly reduce driving, even when transit is described as poor. Since driving *must* be reduced², the pricing of parking is desirable.

Shared parking is also recognized as desirable because it can sometimes result in less parking being needed.

Although the advantages of pricing and sharing parking have been recognized for many years, these practices are still rare. This paper identifies some of the reasons for this lack of progress. The pricing and sharing method of this paper has a natural transparency and ease of use that would reduce many of the concerns. This paper also suggests that those governments that have the necessary resources can take the lead role in developing and implementing the described systems. These governments will recover their investments, over time.

This paper describes how parking facilities could be tied together and operated in an optimum system, named *Intelligent Parking*. The description of *Intelligent Parking* is sufficient to support a “Request for Proposal” process, leading to full implementation.

There are two distinct parts to *Intelligent Parking*. The first is how to set the price. The second is how to distribute the earnings. Briefly, the earnings go to the individuals in the group for whom the parking is built.

Table 1 Eleven Cases of Pricing Impact on Parking Demand

Location	Number of Workers @ Number of Firms	1995 \$'s Per Mo.	Parking Use Decrease
<i>Group A: Areas with poor public transportation</i>			
West Los Angeles	3500 @ 100+	\$81	15%
Cornell University, Ithaca, NY	9000 Faculty & Staff	\$34	26%
San Fernando Valley, Los Angeles	850 @ 1	\$37	30%
Costa Mesa, CA	Not Shown	\$37	22%
Average for Group		\$47	23%
<i>Group B: Areas with fair public transportation</i>			
Los Angeles Civic Center	10,000+ @ "Several"	\$125	36%
Mid-Wilshire Blvd, Los Angeles	1 "Mid-Size" Firm	\$89	38%
Washington DC Suburbs	5,500 @ 3	\$68	26%
Downtown Los Angeles	5,000 @ 118	\$126	25%
Average for Group		\$102	31%
<i>Group C: Areas with good public transportation</i>			
U. of Washington, Seattle, WA	50,000 employees, students	\$18	24%
Downtown Ottawa, Canada	3,500 government staff	\$72	18%
Bellevue, WA	430 @ 1	\$54	39%*
Average for Group, except Bellevue, WA Case*		\$45	21%
Overall Average, Excluding Bellevue, WA Case*			25%

* Bellevue, WA case was not used in the averages because its walk/bike facilities also improved and those improvements could have caused part of the decrease in driving.

PERTINENT BACKGROUND INFORMATION

- Vehicle miles traveled (VMT) are a major cause of global warming and pollution^{2,3}.
- California's Metropolitan Planning Organizations (MPOs) will need to adopt strategies that reduce vehicle miles traveled (VMT), in order to meet SB375 GHG reduction targets, to be issued by the California Air Resources Board in late 2010, for years 2020 and 2035².
- The appropriate pricing of parking is one of the least costly documented tools to reduce VMT.
- New technologies, such as sensors feeding computer-generated billing, offer the potential to efficiently bill drivers for parking and alert law enforcement of trespassers.
- Reformed parking policies can increase fairness, so that, for example, people who use transit or walk do not have to pay higher prices or suffer reduced wages, due to parking.

- Methods to unbundle parking cost are inefficient unless they support the spontaneous sharing of parking spaces. Shared parking with unbundled cost would ultimately allow cities to require significantly less parking.
- Typical systems of timed parking and metered parking are far from ideal. Parking has no automated record keeping, so it is difficult to know where there is too much or too little.
- Good policies will eventually let cities turn parking minimums into parking maximums.

A GLIMPSE INTO A POSSIBLE FUTURE

Jason is driving to work for the first time in several years. He has decided to save money by carrying home a new 3-D, big-screen computer, which he plans to purchase at a store near his office after work. He wanted to avoid paying delivery charges.

Things have been changing around his office development since they unbundled the cost of parking at the near-by train station. Many people who caught the early trains and lived close to the station stopped driving and parking in the best parking spaces; demand for housing close to the station went up; and wealthy riders, who insisted on driving, did so, confident that they could always find parking as close to the platform as their schedules required, due to congestion pricing. Who would have guessed how much those people were willing to pay? It was shocking. Parking-lot earnings, paid to round-trip train riders, meant that the net cost to ride the train went significantly down. Ridership and neighborhood vitality both went significantly up. All Jason knew was that the price to park at his office had been going up yearly because of increased land values. His parking-lot earnings from his office had been increasing almost every month, due to the ripple effect of train riders parking off-site at cheaper parking. Some of them were using his office parking.

As he pulls out of his driveway, he tells his GPS navigation unit his work hours (it already knew his office location), the location of the store where he plans to buy the computer, and his estimated arrival and departure times at the store. He tells the GPS unit he wants to park once, park no more than 1 block from the store, walk no more than 1 mile total, and pay no more than an average of \$2 per hour to park. He is not surprised to hear the GPS tell him that his request is impossible. He tells the GPS he will pay an average of \$3 per hour and learns that the GPS has located parking.

It guides him into a church parking lot. He hopes the church will use his money wisely. The GPS tells him the location of a bus stop he could use to get to work and the bus's next arrival time at the stop. With automatic passenger identification and billing, the bus has become easy to use, except that it is often crowded. Jason gets out of the car and walks to work, with no action required regarding the parking.

Three weeks later, when Jason gets his monthly statement for his charges and income for automotive road use, transit use, parking charges, and parking earnings, he finds that the day's parking did indeed cost about \$30 for the 10 total hours that he parked. He notes that the parking-lot earnings for his office parking averaged about \$10 per day that month. He then notices the parking lot earnings from the store, where he spent about \$1000 dollars. He sees that the parking-lot earnings percent for the store that month was 1.7%, giving him about \$17. So for the day, Jason only spent a net of about \$3 on parking. Then he realized that he should have had the computer delivered after all. If he would have bicycled that day, as he usually did, he would have still gotten the \$27 earnings from the two parking facilities and he would have paid nothing

for parking. So the choice to drive cost him \$30. He remembers that the delivery would have only been \$25 dollars. Oh well. He enjoyed his before-work and after-work walks.

THE CASE FOR LESS PARKING

Less parking will support more compact development.¹ This makes walking and biking more enjoyable and less time consuming. There would certainly be less “dead space”, which is how parking lots feel to people, whether they arrive by car or not, after they become pedestrians.

Since parking can be expensive, less parking can reduce overhead costs significantly, such as leasing expense and parking-lot maintenance cost. Less overhead means more profit and less expense for everyone. A need for less parking can create redevelopment opportunities at existing developments and reduce project cost at new developments.

At new developments, car-parking costs could prevent a project from getting built.²

THE CASE FOR SHARED PARKING

Shared parking for mixed uses means that less parking is needed. For example, shared parking could be used mostly by employees during the day and mostly by residents at night.

Fully shared parking means that very little parking would be off limits to anyone. In a central business district with shared parking, drivers would be more likely to park one time per visit, even when going to several locations. Pedestrian activity adds vitality to any area.

THE CASE FOR APPROPRIATELY-PRICED PARKING

To Reduce Driving Relative to Zero Pricing

Traditional Charging or Paying Cash-out Payments

As shown in the Introduction, this relationship (pricing parking reduces driving) is not new.³

Using results like Table 1, at least one study⁴ has used an assumption of widespread pricing to show how driving reductions could help meet greenhouse gas (GHG) target reductions. Dr. Silva Send of EPIC <http://www.sandiego.edu/epic/ghgpolicy/> assumes that all work locations with 100 employees or more in San Diego County will implement cash-out, to result in 12% less driving to work. Currently, almost all employees in San Diego County “park for free”, unless they happen to work in a downtown core area.

¹ This is especially true of surface parking, which only accommodates 120 cars per acre.

² On September 23, 2008, a panel of developers reviewed the Oceanside, Ca. “Coast Highway Vision” http://www.ci.oceanside.ca.us/pdf/chv_finalvisionstrategicplan.pdf. Parts of this plan were described as smart growth.

At the review, developer Tom Wiegel said, “Parking is the number 1 reason to do nothing,” where “do nothing” meant “build no project.” The other developers at the meeting agreed.

³ For many years the Victoria Transport Policy Institute (VTPI) has been recognized as a source of reliable information on “Transportation Demand Management”, or TDM.

From http://www.vtpi.org/tdm/tdm72.htm#_Price_Parking:

Even a relatively small parking fee can cause significant travel impacts and provide significant TDM benefits.

“TDM Benefits” refers to the many public and private benefits of having fewer people choosing to drive.

Current, Best-Practice “Unbundling”

The “best-practice” use of the phrase, “unbundled parking cost”, is to describe the case where either the cost of parking, for the case of a condominium, or the rent for parking, for the case of an apartment, is separated from either the purchase price and common fees or the rent of the dwelling unit.

This gives the resident families the choice of selecting the number of parking spaces they would like to rent or buy, including the choice of zero. This would tend to reduce the average number of cars owned per dwelling unit and, in this way, would also tend to reduce driving. Its major drawback is that this method does not encourage sharing.

To Increase Fairness and Protect the US Economy

It is stated above that almost all employees in San Diego County “park for free”. Of course there is really no such thing as “parking for free”. So-called “free parking” always reduces wages or increases costs. At a work site, it reduces everyone’s wage, even those employees that never drive. At an apartment complex, so-called “free parking” increases the rent. Therefore, “free parking” at work or at apartments violates the fundamental rule of the free market, which is that people should pay for what they use and not be forced to pay for what they do not use. Parking should at least be priced to achieve fairness to non-drivers.

The US economy would also benefit. Reductions in driving would lead to reductions in oil imports, which would reduce the US trade deficit.⁴

BARRIERS TO PROGRESS

Given all this, it might seem that the widespread pricing of parking should have happened by now. However there are barriers. In 2007, a majority of the City Council of Cupertino, Ca. indicated that they wanted their City Manger to negotiate reduced parking requirements with any company that would agree to pay sufficient cash-out payments. To this date, no company, including Apple Inc., has expressed an interest. Most companies probably perceive cash-out as expensive. Even if they realize they could get a reduced parking requirement in exchange for paying sufficient cash-out amounts and even if the economics worked in support of this action (quite possible where land is expensive), they want to stay focused on their core business, instead of getting involved in new approaches to parking, real estate, and redevelopment.

On the other hand, simply charging for parking and then giving all the employees a pay raise is probably going to run into opposition from the employees, who will feel that they would be losing a useful benefit.

In addition, neighbors fear the intrusion of parked cars on their streets. Permit parking, which could offer protection, is not always embraced. City Council members know that a sizable fraction of voting citizens believe that there can actually never be too much “free parking”,

⁴ From http://en.wikipedia.org/wiki/Balance_of_trade#Warren_Buffett_on_trade_deficits, Warren Buffet wrote in 2006,

“The U.S. trade deficit is a bigger threat to the domestic economy than either the federal budget deficit or consumer debt and could lead to political turmoil. Right now, the rest of the world owns \$3 trillion more of us than we own of them.”

Professor Shoup's famous book⁵ notwithstanding. Some Council members probably feel that way themselves.

It doesn't help that current methods of charging for downtown parking are often very inefficient.⁵ For example, downtown Oceanside, California has parking meters that will only accept coins. Besides this, all their on-street, downtown parking is timed, with maximums from 10 minutes to 4 hours. These time limits are enforced by a city employee, who applies chalk from a tire to the street and then records the time. However, by watching the time and moving their car soon enough, drivers can avoid getting a ticket. Of course, they could instead drive to the mall and not have to worry about having coins or elapsed time since parking. It is not surprising that downtown merchants often object to charging for parking.

In summary, those that resist charging for parking, *based on their perceptions*, include

- Companies, *who fear the complexity and expense of paying cash-out payments*;
- Employees, *who fear of losing a current benefit*;
- City leaders, *who fear the political repercussions*;
- Downtown patrons, *who dislike the inconvenience and worry*;
- Downtown business owners, *who fear that it will drive away customers*.

THE COST, VALUE, AND FAIR PRICE OF PARKING

Estimated and Actual Capital Cost

Surface Parking

One acre of surface parking will accommodate 120 cars. Land zoned for mixed use is sometimes expensive. At \$1.2 million per acre, the land for a single parking space costs \$10,000.

Construction cost should be added to this to get the actual, as-built cost of each parking space. Estimated cost can be determined by using appraised land value and construction estimates. For new developments, after the parking is constructed, it is important to note the actual, as-built cost.

Parking-Garage Parking

One acre of parking-garage will accommodate considerably more than 120 cars. The construction cost of the garage and the value of its land can be added together to get the total cost. Dividing that total cost by the number of parking spaces yields the total, as-built cost of each parking space. Adding levels to a parking garage may seem like a way to cut the cost of each parking space, for the case of expensive land. However, there is a limit to the usefulness of this strategy because the taller the parking garage, the more massive the supporting structural members must be on the lower levels, which increases total cost. Parking-garage parking spaces are often said to cost between \$20,000 and \$40,000. The actual costs should be noted.

Underground Parking

In order to compute an estimate for the cost of a parking space that is under a building, it is necessary to get an estimate of the building cost with and without the underground parking. The difference, divided by the number of parking spaces, yields the cost of each parking space. The

⁵ According to Bern Grush, Chief Scientist of Skymeter Corporation <http://www.skymetercorp.com/cms/index.php>, often two-thirds of the money collected from parking meters is used for collection and enforcement costs.

cost or value of land plays no role in the cost of this parking. However, it does not follow that this parking is cheap. Underground parking spaces are often said to cost between \$60,000 and \$90,000 dollars each. Although there will be an “as built” cost of the building with the parking, there will never be an “as built” cost of the building without the parking. However, after the construction is done, the estimate for the cost of the underground parking should be reconsidered and re-estimated if that is needed. The final, best-estimate cost should be noted.

Value

Initially, value and cost are the same. For surface parking and parking-garage parking, the value would initially be the same as the as-built cost. For underground parking, the value would initially be the same as the best-estimate cost. However, over time, the value must be updated. Both construction costs and land-value costs will change. The value assigned to a parking place should always be based on the current conditions.

Fair Pricing

Parking space “values”, as described above, must first be converted to a yearly price by using a reasonable conversion factor. This conversion factor could be based on either the “cost of money” or the “earnings potential of money”. It is expected that this conversion factor would be 2% to 5% during times of low interest rates and slow growth; but could be over 10% during times of high-interest and high growth. For example, if the surface parking value is \$12,000 and it is agreed upon to use 5% as the conversion factor, then each parking spot should generate \$600 per year, just to cover capital costs. The amount needed for operations, collection, maintenance, depreciation, and any special applicable tax is then added to the amount that covers capital cost. This sum is the amount that needs to be generated in a year, by the parking space.

The yearly amount of money to cover capital cost needs to be re-calculated every year or so, since both the value and the conversion factor will, in general, change each year. The cost of operations, collection, maintenance, depreciation, and any special applicable tax will also need to be reconsidered.

Once the amount generated per year is known, the base price, per unit year, can be computed by dividing it (the amount generated per year) by the estimated fraction of time that the space will be occupied, over a year. For example, if a parking space needs to generate \$900 per year but it will only be occupied 50% of the time, the time rate charge is \$1800 per year. This charge rate per year can then be converted to an hourly or even a per-minute rate. The estimated fraction of time that the parking is occupied over a year will need to be reconsidered at least yearly.

NEW DEFINITIONS TO PROMOTE AN OBJECTIVE VIEW OF PRICING

- The “fair price” means the price that accounts for all costs.
- The “baseline amount of driving” means the driving that results from the application of the fair price.
- “Zero transportation demand management” (“zero TDM”) is the amount of demand management that results when the fair price is used. It will result in the baseline amount of driving.
- “Negative TDM” refers to the case where the price is set below the fair price. This will cause driving to exceed the baseline amount. Since TDM is commonly thought to be an action that reduces driving, it follows that negative TDM would have the opposite effect.
- “Positive TDM” refers to the case where the price is set above the fair price. This would cause the amount of driving to fall below the baseline amount.

Clearly, so-called “free parking” is an extreme case of negative TDM. The only way to further encourage driving would be to have a system that pays a driver for the time their car is parked.

THE GOALS OF *INTELLIGENT PARKING*

- There is only one agency operating all parking. (“All parking” does not include driveways and garages in single-family homes.) *Intelligent Parking* is designed and installed by regional or state government, using low-bid contractors, with design and start-up costs covered by the overhead portion of collection fees.
- Nearly all parking is shared. Almost always, anyone can park anywhere. Those who want exclusive rights to parking will pay “24/7” (all day, every day).
- Parking is operated so that the potential users of parking will escape the expense of parking by choosing to not use the parking. This characteristic is named “unbundled” because the cost of parking is effectively unbundled from other costs.
- Parking is priced and marketed to eliminate the need to drive around looking for parking.
- Parking at any desired price is made as easy as possible to find and use.
- Records of the use of each parking space are kept, to facilitate decisions to either add or subtract parking spaces.
- The special needs of disabled drivers, the privacy of all drivers, and, if desired, the economic interests of low-income drivers are protected.

DEFINITIONS & CONCEPTS OF *INTELLIGENT PARKING*

Parking Beneficiary Groups

There are at least 7 types of beneficiary groups. Note that in all cases, members of beneficiary groups must be old enough to drive.

- 1.) People who have already paid for the capital cost of parking. An example of this type of beneficiary group would be the owners of condominiums, where parking has been built and the cost is included in the price of the condominium. Note that although they have technically already paid for the parking, if they borrowed money to pay for some portion of the price, the cost is built into their monthly payment. This illustrates why the value of parking and the cost of borrowing money (rate of return on money) are key input variables to use to compute the appropriate base, hourly charge for parking.
- 2.) People who are incurring on-going costs of parking. An example of this type of beneficiary group is a set of office workers, where the cost of “their” parking is contained in either the building lease or the cost of the building. Either way, the parking costs are reducing the wages that can be paid to these employees.⁶
- 3.) People who are purchasing or renting something where the cost of the parking is included in the price. Examples of this beneficiary group are people that rent hotel rooms, rent an apartment, buy items, or dine in establishments that have parking.

⁶ Such parking is often said to be “for the benefit of the employees”. Defining this beneficiary group will tend to make this statement true, as opposed to the common situation where the employees benefit only in proportion to their use of the parking.

- 4.) People who own off-street parking as a business. They could be the individual investors or could be a government or government-formed entity.
- 5.) People who are said to benefit from parking, even though the money for the parking has been supplied by a source that may have very little relationship to those that are said to benefit. An example of this group would be train riders that make round trips from a station which has parking that is said to be “for riders”. Students at a school with parking would be another example.
- 6.) People who are considered by many to be the logical beneficiaries of on-street parking. Owners of single-family homes are the beneficiaries of the parking that is along the boundaries of their property. The same status is given to residents of multi-family housing.
- 7.) Governments. Since they build and maintain the streets, they should get a significant benefit from on-street parking.

Unbundled Cost and Spontaneous Sharing

“Unbundled cost” means those who use the parking can see exactly what it costs and those who don’t use the parking will either avoid its cost entirely or will get earnings to make up for the hidden parking cost they had to pay. This conforms to the usual rule of the free market where a person only pays for what they choose to use. Unbundled cost is fair.

“Spontaneous sharing” means that anyone can park anywhere at any time and for any length of time. Proper pricing makes this feasible.

How to Unbundle

The method of unbundling can be simply stated, using the concept of “beneficiary group” as discussed above. First, the fair price for the parking is charged. The resulting earnings⁷ amount is given to the members of the beneficiary group in a manner that is fair to each member. Methods are described below.

Why this Supports Sharing

Members of a beneficiary group benefit financially when “their” parking is used. They will appreciate users increasing their earnings. They are also not obligated to park in “their” parking. If there is less-expensive parking within a reasonable distance, they might park there, to save money. This is fine, because all parking is included in the *Intelligent Parking* system.

Computing the Earnings for Individuals

Intelligent Parking must be rigorous in paying out earnings⁷. For a mixed use, the total number of parking spaces must first be allocated to the various beneficiary groups. For example in an office/housing complex, 63.5% of the parking might have been sold with the office. If so, the housing portion must be paying for the other 36.5%. For this case, it would follow that the first step is to allocate 63.5% of the earnings to the workers and 36.5% to the residents.

⁷ The earnings amount is the revenue collected minus the collection cost and any other costs that will have to be paid due to the implementation of *Intelligent Parking*. The costs associated with the parking, paid *before* the implementation of *Intelligent Parking*, should *not* be subtracted from the revenue because they will continue to be paid as they were before the implementation of *Intelligent Parking*. Therefore, these costs will continue to reduce wages and increase the prices of goods and services.

How the monthly earnings are divided up among the members of the beneficiary group depends on the beneficiary group type. For each member, the group's total monthly earnings amount is always multiplied by a quantity and divided by the sum (the sum is the denominator) of that quantity, for all members.

For example, for each employee, the multiplier is the number of hours that the employee worked over the month while the denominator is the total number of hours worked by all employees over the month. At a school, for each student, the numerator is the total time spent at the school, over the month, while the denominator is the sum of the same quantity, for all the students.

For a train station with parking being supplied for passengers that ride on round trips of one day or less, the numerator is the passenger's monthly hours spent on such round trips, over the month; while the denominator is the total number of hours spent by all passengers on such round trips, over the month. Radio Frequency Identification (RFID) units on passengers could support an automated calculation of monthly charges for fares, as well as monthly hours on round trips.

At a shopping center, the numerator is the sum of the money spent by the shopper, over the month, while the denominator is the total amount of money spent by all shoppers over the month.

At a condominium, the numerator is the number of parking places that were paid for (directly or indirectly) by the resident family and the denominator is the total number of parking places at the condominium project; similarly, for apartment complexes.

Where Earnings Are Low

The goal is that if someone doesn't park, they don't pay, either directly or indirectly, because the earnings that they get will balance out their losses (like reduced wages, for example). However, charging for parking that few want to use will not sufficiently compensate the people that have been forced, or are being forced, to pay for such parking. The only remedy in this case is to redevelop the parking or lease the parking in some other way, for storage, for example. The earnings from the new use should go to those that are in the beneficiary group that was associated with the low-performing parking.

Why This Method of Unbundling Will Feel Familiar to Leaders

Developers will still be required to provide parking and will still pass this cost on, as has been discussed. There will be no need to force an owner of an exiting office with parking to break his single business into two separate businesses (office and parking).

Parking beneficiaries are identified that conform to traditional ideas about who should benefit from parking.⁸

Unbundling the Cost of On-Street Parking

The revenue from on-street parking in front of businesses will be split evenly between the city and the business's parking beneficiaries. All of the earnings from on-street parking in front of apartments or single-family homes will be given to the resident families.⁹

⁸ Showing exactly where parking earnings go will reduce the political difficulties of adopting pay parking in a democracy where the high cost of parking is often hidden and rarely discussed.

⁹ Although governments own the streets, often, back in history, developers paid for them and this cost became embedded in property values. Admittedly, how to allocate on-street parking earnings is somewhat arbitrary. With

Special Considerations for Condominiums

Unbundling for a condominium owner means that, although their allocated amount of parking has added to their initial cost, their allocated amount of parking also earns money for them. Unbundling for a condominium could also mean that an owner can choose to have control over a single or several parking places. Such parking spaces could be equipped with a red light and a green light. If the red light is lit, this will mean that the space is not available for parking, except for the person who is controlling the spot. If the green light is lit, it will mean that the space is available to anyone. A space that is being reserved with a red light is charged at the full price to the condominium owner that has control over the space. The owner that controls these spaces can change the state of the parking space (available or not available) by either a phone call, on line, or at any pay station system that might be in use for the system. After condominium owners experience the cost of reserving a space for themselves, they might give up on the idea of having their own, personal, unshared parking space; especially since *Intelligent Parking* will give most owners and their guests all the flexibility they need in terms of parking their cars.

Some people think that condominium parking should be gated, for security reasons. However, parking within parking garages needs to be patrolled at the same frequency level as on-street parking, which is enough to ensure that crime around either type of parking is very rare. Cameras can help make parking garages that are open to the public safe from criminal activity.

Special Considerations for Renters

Unbundling for renters means that, although their allocated amount of parking increases their rent, their allocated amount of parking also earns money for them. Therefore, their traditional rent (includes parking) is effectively reduced by the money earned by those parking spaces allocated to them. Renters will be motivated to either not own a car or to park in a cheaper location. Parking in a cheaper location is not a problem because all parking is part of the *Intelligent Parking* system. Renters will welcome anyone to park in “their” parking, because it will increase their earnings.

Special Considerations for Employers

At first, companies may want the option of offering “free parking” to their employees so as to be able to compete with traditional job sites. This means giving employees that drive every single day an “add-in” amount of pay so that the sum of the add-in and their parking-lot earnings equals their charge, for any given monthly statement. The operator of the parking, which sends out statements, can pay out the “add in” amount, in accordance with the company’s instruction. The company will then be billed for these amounts. There could be no requirement for the company to provide any such “add-in” amount to the employees that don’t drive every day. This would allow the company to treat its every-day drivers better than other employees and so this would be a negative TDM. However, this economic discrimination would be substantially less than the current, status-quo, economic discrimination, where drivers get “free” parking and non-drivers get nothing.

Clusters of Parking

Clusters are a contiguous set of parking spaces that are nearly equal in desirability and thus can be assigned the same price. They should probably consist of from 20 to 40 spaces. For off-street

parking, they could be on either side of the access lane to the parking spaces, so that an observer could see the 20 to 40 cars, and get a feel for the vacancy rate. At a train station, clusters will normally be organized so that their parking spaces are approximately an equal distance from the boarding area. On-street clusters would normally conform to our current understanding of what a block is, which is to say from one cross street to the next cross street. The width of the street and the length of the block should be taken into account in defining on-street clusters of parking and in deciding if the parking on either side of the street should or should not be in the same cluster of parking spaces.

Examples of Good and Bad Technology

Parking Meters or Pay Stations

Parking meters are a relic of an earlier period, before computers. Pay stations do not add enough usefulness to merit their inclusion in *Intelligent Parking*, except as a bridge technology. Once good systems are set up, pay stations should cost additional money to use because of their expense. It would be best to devise an implementation strategy that will minimize their use when the system is first put into effect and will take them out of service as soon as possible.

Radio Frequency Identification Backed Up by Video-Based “Car Present” and License Recognition

Government will eventually enter into an RFID (Radio Frequency Identification) age. Organizers of large athletic events already have. Organizers that put on large open-water swims, foot races, and bike rides have routinely used RFID for many years.¹⁰ An RFID vendor in San Diego¹¹ states that passive RFID units cost less than \$5, are reliable, are durable, and they could be used to identify cars as well as people. He also sees no problem in implementing most of the features of *Intelligent Parking*.¹²

Automatic Data Collection and Sending Out Statements

Note that the “back end database” of Dr. Carta’s written statement¹² refers to the ability to send statements of earnings and billing to students.¹³

¹⁰ For example, over 20,000 people ran the 2008 Bay-to-Breakers foot race in San Francisco. Each runner had a “chip” in their shoe lace. Each runner’s start time and finish time were recorded and all results were available as soon as the last runner crossed the finish line.

¹¹ David R. Carta, PhD, CEO Telaeris Inc., 858-449-3454

¹² Concerning a Final Environmental Impact Report-approved and funded new high school in Carlsbad, California, where the School Board has signed a *Settlement Agreement* to consider “*unbundled parking*”, “*cash-out*”, and “*pricing*”, Dr. Carta wrote, in a January 13th, 2010 written statement to the Board,

I wanted to send a quick note discussing the technical feasibility of tracking cars into a lot without impacting students or requiring the need for gates. Mike Bullock and I have discussed this project; it can be accomplished straightforwardly by utilizing Radio Frequency Identification and/or Video Cameras integrated with automated license recognition systems. The cars would need to register with the system at the start, but it would be fairly painless for the users after the initial installation. The back end database system can also be implemented both straightforwardly and at a reasonable price.

This is not necessarily a recommendation of the proposal for unbundled parking. Rather it is strictly an unbiased view of the technical feasibility of the proposal to easily and unobtrusively track cars, both registered and unregistered, into a fixed lot.

¹³ In an earlier email on this subject, Dr. Carta wrote,

Putting it Together

Certainly, government, and in particular transit agencies and parking agencies, could use RFID-based technology. For example, when a person with an RFID unit which is tied to a billable address or a credit card with an open account gets on a bus or a train, they should not have to pay at that time, visit a pay station, or “swipe a card” that has a positive balance. Utility customers that pay their bills are not required to pre-pay. The same courtesy should be extended to transit riders, people that drive on roads, people that get parking-lot earnings, and people that park cars. There should be one monthly bill or statement, for all four activities.

Global Positioning Systems GPS

An alternative model is to have GPS systems in cars that would detect the car’s parking location, that location’s current charge rate, and would perform all of the charging functions in the car. The only information the parking-lot-enforcement system would need is whether or not a car being parked is owned by a bill-paying owner. The car owner’s responsibility would be to pay the bills indicated by the box in the car. The box would need to process a signal that a bill had been paid. It would also need to process pricing signals.

Not Picking Winners

The purpose of this report is to describe what an ideal system would do, *not* how it is done. How a proposed system works is left to the systems, software, and hardware engineers that work together to submit a proposal based on this description of what an ideal system does.

Privacy

Privacy means that no one can see where someone has parked, without a search warrant. Also, the level of the detail of information that appears on a bill is selected by the customer.¹⁴

Ease of Use for Drivers

For credit-worthy drivers that have followed the rules of the system, pay parking will not require any actions other than parking. Paying for all parking fees over a month is then done in response to a monthly billing statement. Parking will feel to the consumer like a service provided by a municipality, such as water, energy, or garbage. One important difference is that users belonging to a “beneficiary group” will get an earnings amount in their monthly statement. Those that earn more than what they are charged will receive a check for the difference. This ease of use will make all parking less stressful.

Base Price

Off-Street

This is not too tough - we probably would integrate with a service that already sends physical mail from an electronic submission instead of re-inventing this wheel.

¹⁴ License plates that have no RFID tags fail to use the best technology to accomplish the primary purpose of license plates, which is to identify and help intercept cars used in a crime. Identifying cars is a legitimate government goal. Protecting privacy is also a legitimate goal. Both goals can be realized with good laws, good enforcement, and good systems engineering.

Off-street parking is priced so that even if demand does not threaten to fill the parking beyond 85%, the money generated will at least equate to an agreed-upon return on the parking value and pay all yearly costs. Equation 1 shows the calculation of the hourly rate.

$$r_{BaselineHourly} = \frac{(r_{Investment} \times v_{Parking}) + c_{YOPD}}{(n_{HoursPerYear} \times f_{TO})} \quad (\text{Eq. 1})$$

where:

$r_{BaselineHourly}$	=	the computed baseline hourly rate to park
$r_{Investment}$	=	yearly return on investment, such as .06
$v_{Parking}$	=	value of a parking space, such as (parking garage) \$40,000
c_{YOPD}	=	yearly operations ¹⁵ plus depreciation, per space, such as \$100
$n_{HoursPerYear}$	=	number of hours per year, 24 x 365 = 8760 Hours per Year
f_{TO}	=	fraction of time occupied, such as 0.55.

For the example values given, the base hourly rate of parking, to cover the cost of the investment, operations¹⁵, and depreciation is \$0.519 per hour. This could be rounded up to \$0.52 per hour. This price could also be increased to result in positive TDM, to reduce driving more than the fair-price, zero-TDM amount.

On-Street

If on-street parking is located within walking distance (one-quarter mile) of off-street parking, its base price is set equal to the closest off-street parking's base price. Otherwise, it is set to some agreed-upon value, like fifty cents per hour. However, on-street parking has a special meaning for downtown merchants and for neighborhoods, two powerful political forces in any city. Merchants that have few cars parking on their street, even though it is permitted, are probably failing in their businesses. They would like free parking to help draw visitors to their store front. Neighborhoods that are not impacted by parking would probably prefer no pricing. For these reasons, for any on-street parking cluster, no price is charged until the cluster occupancy reaches 50%. (Time of day is irrelevant.)

Congestion Pricing

The time-rate price of parking is dynamically set on each cluster of parking, to prevent the occupancy rate from exceeding 85% (to reduce the need to drive around looking for parking). An 85% occupancy rate (15% vacancy) results in just over one vacant parking space per city block⁵. If the vacancy rate is above 30%, the price is left at the baseline hourly rate. If vacancies fall below 30%, the price can be calculated in a stair-step method, such as shown in Table 2.

Equation 2 is an alternative method.

In either case, the total charge is time parked, multiplied by the time-averaged, time-rate price. The base multiplier would be adjusted to be just large enough to keep the vacancy rate from falling below a desired level, such as 15%, so it is always easy to find parking.

¹⁵ This includes money for policing, cleaning, maintenance, any applicable parking tax, and all collection costs. Collection costs will need to include an amount to recover the development and installation costs of *Intelligent Parking*.

Table 2 Hourly Rates for 2 Base Multipliers and a Baseline Hourly Rate of \$0.52

Vacancy Rate	Base Multiplier = 2			Base Multiplier = 2.5		
	Multiplication		Hourly Rate	Multiplication		Hourly Rate
	Formula	Value		Formula	Value	
Above 30%	2^0	1	\$0.52	$2^{0.0}$	1	\$0.52
25% to 30%	2^1	2	\$1.04	$2^{0.1}$	2.5	\$1.30
20% to 25%	2^2	4	\$2.08	$2^{0.2}$	6.25	\$3.25
15% to 20%	2^3	8	\$4.16	$2^{0.3}$	15.625	\$8.13
10% to 15%	2^4	16	\$8.32	$2^{0.4}$	39.0625	\$20.31
5% to 10%	2^5	32	\$16.64	$2^{0.5}$	97.6563	\$50.78
Below 5%	2^6	64	\$33.28	$2^{0.6}$	244.1406	\$126.95

$$r_{\text{HourlyRate}} = r_{\text{BaselineHourly}} \times (B^{(30-V)/5}), \text{ for } V < 30; r_{\text{BaselineHourly}}, \text{ otherwise (Eq. 2)}$$

where:

$r_{\text{HourlyRate}}$ = the congestion-priced hourly rate to park

$r_{\text{BaselineHourly}}$ = the baseline hourly rate to park, such as \$0.52 per hour (taken from from Eq. 1.

B = the base of the multiplier being computed, such as 2.50

V = the vacancy rate percent, such as 17.5, for 7 vacancies in a cluster of 40 spaces, $100 \cdot (7/40) = 17.5$

For the example values given, the hourly rate of parking would be \$9.88 per hour.

Pricing Predictions and Notifications

Drivers will develop strategies for their routine trips. The computer system that keeps records of parking use will also provide help for users. The *Intelligent Parking* website will direct a user to an appropriate cluster of parking if the user provides the destination location or locations, the time and date, and the hourly rate they wish to pay. If the walk is going to be long, the website could suggest using transit to get from the cheaply-priced parking to the destination. In such cases, the website may also suggest using transit for the entire trip.

Another user option is to specify the time, location, and the distance the user is willing to walk. In this case, the computer would give the cheapest cluster of parking available at the specified walk distance. The price prediction would be provided.

All price predictions would also have a probability of correctness associated with them. If a user can show that a computer has predicted a much lower price than what actually occurred, with a sufficiently high probability, it would be reasonable to charge the user the predicted price rather than the actual price.

Websites could routinely inform viewers when occupancy rates are expected to be unusually high, due to a special event (for example, a sporting event). The parking system website will always give current and predicted hourly rates for all locations. The hourly rates of parking will

also be available at a phone number and possibly at pay stations. The base-price hourly rate, for any parking cluster, would be stable and could therefore be shown on signs. Parking garage entrances could have large video screens showing both predicted and existing price. Users will also learn to look at parking and judge whether congestion pricing applies, or could apply, while their car is parked. It would not be long before these capabilities are added into GPS navigation systems.

Prepaid RFID

To be inclusive, pay stations or convenience stores will offer a pre-paid RFID that can be set on the dashboard of a car. This will support drivers with poor credit or drivers who have not obtained the necessary equipment to support the normal, trouble-free methods. This will also work for drivers that do not trust the system to protect their privacy for a certain trip (by removing or disabling the permanent RFID) or for all trips. No billing would occur.

Enforcement

The system would notify the appropriate law enforcement agency if an unauthorized car was parked. Authorized cars would need either a pre-paid RFID or equipment indicating that their owners had *Intelligent Parking* accounts and were sufficiently paid up on their bills.

IMPLEMENTATION

This description of *Intelligent Parking* will help to implement efficient parking systems. Parking at train stations, schools, and government buildings could introduce many of these concepts. This description of *Intelligent Parking* is sufficient to support a “Request for Proposal” process, which could lead to full implementation. Widespread installation should be done by a government agency, to minimize actions required on the part of the private sector. Laws would simply require the cooperation of all private-sector and government entities.

SUMMARY

A parking plan, *Intelligent Parking* has been described.

1. Technology will make it easy to use for most drivers.
2. Its parking is almost always shared, to support mixed uses.
3. It unbundles cost by charging and having earnings go to the parking beneficiaries.
4. Traditional groups, such as single-family home owners, employees, tenants, train riders, and students benefit from parking. The benefit is equal for drivers and non-drivers.
5. Baseline prices are computed primarily from the value of the parking and an agreed-upon rate of return. On-street parking is free until it is half full, at which time its base price often matches that of the closest off-street parking.
6. For all parking, price is dynamically increased to guarantee availability. Earnings are therefore only limited by what people are willing to pay.
7. Technology helps drivers find parking and decide if they want to drive or use transit.
8. Prepaid RFIDs provide service to those who have poor credit or don't want to be billed.
9. Disabled and perhaps low-income drivers will have accounts that allow them to park at reduced prices and perhaps avoid congestion pricing. Specially designated spots might also be required for disabled drivers.

10. The system will provide reports showing where additional parking would be a good investment and where it would be wise to convert existing parking to some other use.
11. Privacy will be protected. Law enforcement officials would need a search warrant to see where someone's car has been parked. The level of detail on billing would be selected by the car's owner.
12. Implementations could begin in carefully selected locations and expand.

Global warming, air pollution, trade deficits, and fairness are some of the significant reasons that governments have a responsibility to implement *Intelligent Parking*.

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KEYWORDS

A&WMA, Parking, Unbundled, Shared, TDM, cash-out, pricing, beneficiary, greenhouse gas, GHG, GPS, RFID

Equitable and Environmentally-Sound Car-Parking Policy at a Work Site

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Introduction

This paper describes a parking policy that distributes the benefit of parking to all employees, regardless of how often they choose to drive. It does this by

- Charging a fair price for the parking, per unit of time parked, and by
- Giving the total earnings (*total parking-lot earnings*) to the employees, such that each employee's share of the *total parking-lot earnings* is proportion to the time they spend at the work site served by the parking.

The following, additional, optional action would guarantee that no driver loses money under the policy:

- Adding a *must-drive bonus* to each driver's share of the *parking-lot earnings*, if it happened that their share of the *parking-lot earnings* is less than their parking-lot charge. This means that the employee's *must-drive bonus* would be equal to their *parking-lot charge* minus their share of the *parking-lot earnings*.

If an employer decided to pay a *must-drive bonus* to its employees, it would be possible to allow employees to effectively "opt out" of the program so they would not need to be mailed the car-parking statements. The system would feel like "free parking" to them.

Reference 1 describes a more comprehensive policy that will efficiently and conveniently unbundle the cost of parking in all circumstances. It is available at the following URL: <http://www.sandiego.gov/environmental-services/pdf/sustainable/parkingcosts.pdf>.

The system described herein is less complex because it does not include congestion pricing, price predictions, or policies that are unique to on-street parking. These features can be eliminated, because it is assumed that there will be an adequate supply of parking, so no congestion pricing is needed; that the price can be relatively stable, so no price predictions are needed; and finally, that employees can be successfully required to park only in their parking, so there is no need for new, on-street parking policies, designed to protect adjoining neighborhoods from the intrusion of additional parked cars. If the adjoining neighborhoods had permit parking with a 2-hour limit for cars with no permit, very few employees would ever park those neighborhoods, in any case.

Rationale

This system of “unbundled parking cost” will allow all stakeholders to see the actual value of the parking. It will reduce single-occupancy driving to work. Less driving will reduce traffic congestion, air pollution and greenhouse gas (GHG) emissions.

Parking is expensive to provide. Therefore, if no parking had been provided, the saved money could have been invested to increase employee salaries. The method described in this paper allows employees to gain some of that lost salary back, by driving less.

Providing free or underpriced parking only benefits employees that would drive every day, even if they had a method to recover some of their lost salary.

Methods

The parking is operated on the behalf of the employees, as if it were their own business. Those that drive to work are therefore their own customers.

Charge for parking is proportional to time parked and is charged to the employee associated with the car. (A charge rate that is acceptable to all must be established.) For example, if sixty cents per hour is selected, the charging software could round off the parking duration time to the nearest minute and apply a one-cent-per-minute charge. The data-collection method could be implemented with RFID's on cars being detected at parking-lot entrances and exits. Unauthorized cars coming into the employee parking facility would be identified with license-plate detection and, if a car belonging to a felon is driven into the parking lot, a warning notice could be sent to authorities, if this is desired by the company leaders.

Earnings (net revenue, minus the cost of collection and distribution) are given to the employees; in proportion to the time they spend at the work site. This could be based on an employee's schedule or, for more accuracy, could be based on “time-at-the-work-site” data, collected using personal radio frequency identification units (RFIDs) and detectors that are tied to a central, implementing computer. The variables used to compute the amount of money to be paid to an employee are shown in Table 1. The corresponding formula is shown in Figure 1.

Parking statements are automatically sent out monthly, showing the individual's charges and earnings. If desired, the statements could include a *must-drive bonus*, so that no driver loses money under the system. The *must drive bonus* would probably need to come from funds available for employee compensation.

Implementation

Since this is a new system, it would be prudent for the company leaders to have the vendor take the full responsibility for operating the system, for the first 10 years. This arrangement would ensure that the vendor would debug the system and continue to look for operational efficiencies, over the 10 year period. A sliding scale of vendor-compensation could be specified in the contract, as follows: The vendor could operate the system for 10% of the revenue, for the first 5 years; 5% of the revenue, for the next 3 years; and 2% of the revenue, for the final 2 years. For example, if it is assumed that, on average, 600 cars are parked for 8 hours, for 200 days per year, at a rate of 50 cents per hour, then the yearly revenue would be \$480,000 per year. The vendor would therefore collect \$240,000 over the first 5 years, \$72,000 over the next 3 years, and \$28,800 over the last two years. Figure 2 shows contact information and excerpts of received emails, from a San Diego vendor. This vendor has stated that the design and installation of a fully-automated system would be easy to perform.

Table 1 Variables Used to Compute an Employee's Monthly Earnings

Definitions to Compute an Employee's Monthly Earnings	
T_{Employee}	The Employee's Monthly Time at the Work Site
T_{AllEmployees}	Total Monthly Time at the Work Site, All Employees
E_{AllEmployees}	Total Monthly Earnings from the Employee Parking

Figure 1 Formula Used to Compute an Employee's Monthly Earnings

$E_{Employee} = T_{Employee} * (E_{AllEmployees} / T_{AllEmployees})$

Introducing a New Price Differential, for Driving, Compared to Not Driving

Table 2 shows that introducing a price differential into the choice of how often to drive will decrease the amount of driving.

Other Benefits

Depending on the work site's location and the size of its access roads, there could be a substantial decrease in local congestion, improving the health of all employees and those living near the congestion. This parking policy will show neighbors that the company is working to be a good citizen. This program will encourage active transportation, meaning

modes that provide exercise for the employees. It will also teach the employees the value of parking. It is recommended that the method of determining the selected rate of charge be shared with both the employees and the community at large. This program can be thought of as a demonstration project of a new approach to parking.

Figure 2 One Set of Identified-Vendor Information

David R. Carta, Ph.D., CEO TELAERIS Inc. Innovative Solutions and Rapid Development 9123 Chesapeake Dr., San Diego, CA 92123 +1.858.627.9708 : Office +1.858.627.9702 : Fax +1.858.449.3454 : Mobile e-mail: David.Carta@Telaeris.com skype: davidcarta	<p>I reviewed your Intelligent Parking proposal and presentation in their entirety. The identification of vehicles which you suggest for student parking using commercially available RFID technologies is a fairly straightforward process. There are numerous, inexpensive passive (no battery required) RFID tags which have been specifically designed for use on cars and trucks. These tags are installed directly on license plates or windshields, can be read from up to 30 meters away, and can be read as cars drive up to 60 mph. Additionally, automatic license recognition systems, used in conjunction with RFID, can provide a high level of enforcement making it difficult to cheat the system, similar to the Fast Track system which allows tolls to be automatically collected.</p> <p>This is not too tough - we probably would integrate with a service that already sends physical mail from a electronic submission instead of re-inventing this wheel.</p>
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Green House Gas Impacts

S-3-05 is a California Governor's Executive Order to drop the state's Year 2020 levels of greenhouse gas (GHG) emissions to the state's level of 1990 emissions and to drop the state's Year 2050 level of GHG emissions to 80% *below* the state's 1990 levels. If the world were to achieve similar reductions, the earth's level of atmospheric CO₂ would be capped at 450 parts per million (PPM). Figures 3, 4, and 5 show how large 450 PPM is, compared to values over the last 800 thousand years. Reference 2 shows that the goal of S-3-05 is to limit atmospheric CO₂ to 450 PPM and it also shows that even if this cap is achieved, the risk of a human catastrophe caused by global warming is significant. Reference 3's Figure 1 shows that a significant reduction in driving is critically needed.

Conclusion

Adopting this program would benefit the employer, the employees, and the community, in many ways. They will all gain an added understanding of economics, technology, and the power of the free-market principle that sometimes it is better to have people pay for what they use and not force people to lose money for something they don't use. All the members

of the work-place community could take pride in being part of this pioneering effort to reduce driving and greenhouse gas emissions. It would be a demonstration of the fundamental features of Reference 1. It would set an example for other employers.

Table 2 **Eleven Cases of Pricing Impact on the Amount of Driving**

Impact of Financial Incentives on Parking Demand			
Location	Scope	1995 dollars per mo.	Parking Use Decrease
Group A: Areas with little or no public transportation			
CenturyCityDistrict, West Los Angeles	3500 employees at 100+ firms	\$81	15%
Cornell University, Ithaca, NY	9000 faculty & staff	\$34	26%
San Fernando Valley, Los Angeles	1 employer, 850 employees	\$37	30%
Costa Mesa, CA		\$37	22%
Average for Group		\$47	23%
Group B: Areas with fair public transportation			
Los Angeles Civic Center	10000+ employees, several firms	\$125	36%
Mid-Wilshire Blvd., Los Angeles	1 mid-size firm	\$89	38%
Washington DC Suburbs	5500 employees at 3 worksites	\$68	26%
Downtown Los Angeles	5000 employees, 118 firms	\$126	25%
Average for Group		\$102	31%
Group C: Areas with good public transportation			
University of Washington, Seattle Wa.	50,000 faculty, staff & students	\$18	24%
Downtown Ottawa, Canada	3500+ government staff	\$72	18%
Bellevue, WA	1 firm with 430 employees	\$54	39% ²
Average for Group, but not Bellevue Washington		\$45	21%
Over All Average, Excluding Bellevue Washington			25%
¹ Parking vacancy would be higher! ² Not used, since transit & walk/bike facilities also improved.			

Figure 3 **Atmospheric CO₂, Increasing Over Recent Decades**

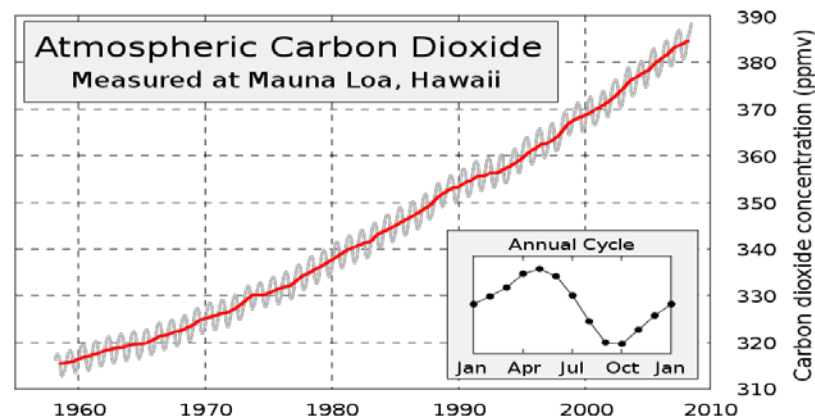


Figure 4 Atmospheric CO₂ and Mean Temperature, 800,000 Years Ago, with 450 PPM CO₂ Shown

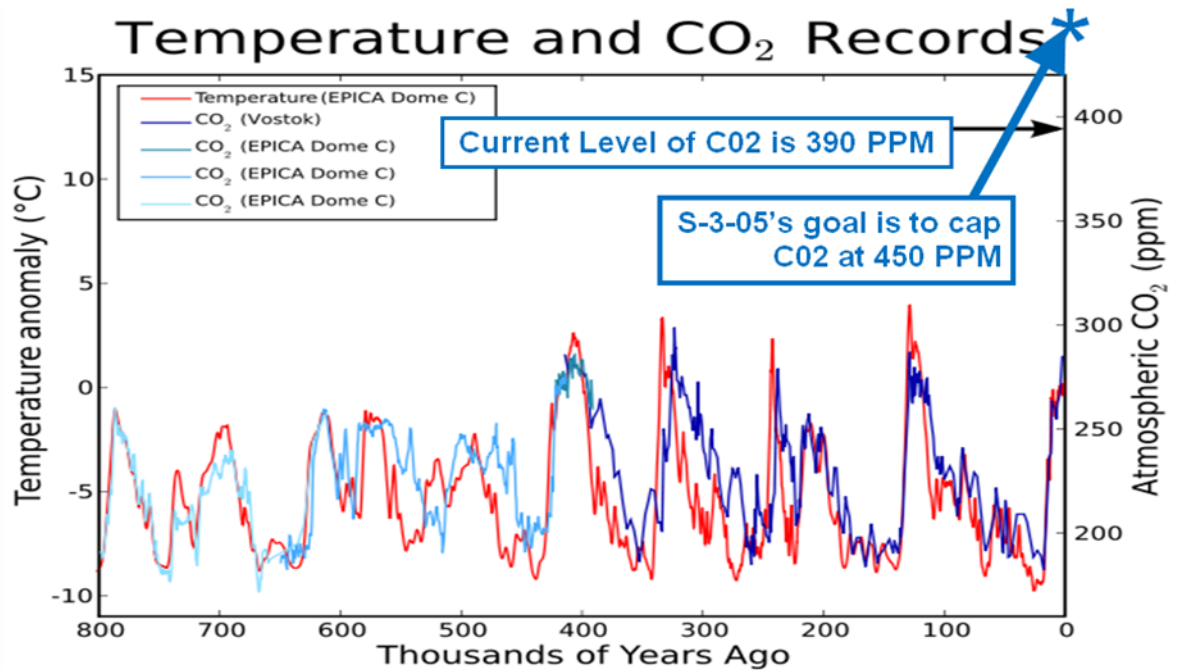
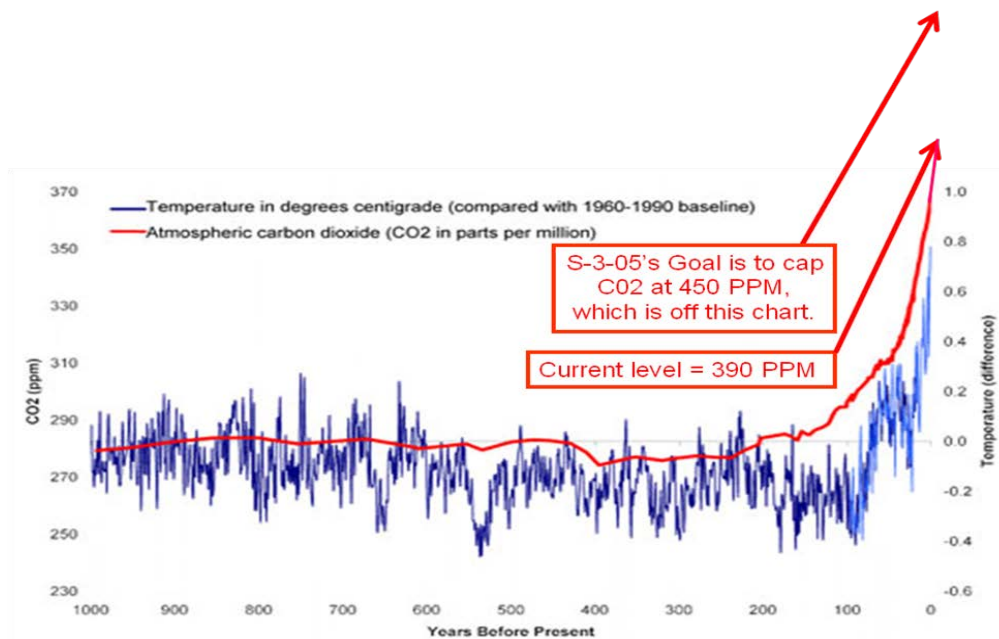


Figure 5 Atmospheric CO₂ and Mean Temperature, Over the Last 1,000 Years



References

- 1.) *A Plan to Efficiently and Conveniently Unbundle Car Parking Costs*, Paper 2010-A-554-AWMA of the proceedings of the 103rd Conference and Exhibition of the Air And Waste Management Association; Mike R. Bullock and Jim R. Stewart, PhD; presented on June 22nd, 2010. <http://www.sandiego.gov/environmental-services/pdf/sustainable/parkingcosts.pdf>.
- 2.) Letter from *Center for Biological Diversity*, to Elaine Chang, Deputy Executive Officer of Planning, Rule Development, and Area Sources of the South Coast Air Quality Management District; *Comments on CAPCOA's Conceptual Approaches Regarding Potential Significance Thresholds for Greenhouse Gas Emissions*; April 17, 2008. [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-1/ghg-meeting-1-comment-letter-center-for-biological-diversity.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-1/ghg-meeting-1-comment-letter-center-for-biological-diversity.pdf)
- 3.) *Communities Tackle Global Warming*, Tom Adams (California League of Conservation Voters), Amanda Eaken, and Ann Notthoff (Eaken and Notthoff are employees of the Natural Resources Defense Council); June 2009. <http://www.nrdc.org/globalwarming/sb375/files/sb375.pdf>

Equitable and Environmentally-Sound Car Parking Policy at Schools

By Mike Bullock

mike_bullock@earthlink.net

July 20, 2011

Introduction

This paper describes a parking policy that distributes the benefit of parking to all students of driving age, regardless of how often they choose to drive. It does this by

- charging a fair price for the parking, per unit of time parked,
and by
- giving the earnings to all students of driving age, in proportion to the time they spend at the school.

This same method is applied to the school's employees.

Reference 1 describes a more comprehensive policy that will efficiently and conveniently unbundle the cost of parking in all circumstances. It is available at the following URL: <http://www.sandiego.gov/environmental-services/pdf/sustainable/parkingcosts.pdf>.

The system described herein is less complex because it does not include congestion pricing, price predictions, or policies that are unique to on-street parking. These features can be eliminated, because it is assumed that there will be an adequate supply of parking, so no congestion pricing is needed; that the price can be relatively stable, so no price predictions are needed; and finally, that students and employees can be successfully required to park only at the school, so there is no need for new, on-street parking policies, designed to protect adjoining neighborhoods from the intrusion of additional parked cars.

Rationale

This system of "unbundled parking cost" will allow all stakeholders to see the actual value of the parking. It will reduce driving to the school. Less driving will reduce traffic congestion, air pollution and greenhouse gas (GHG) emissions.

Parking is expensive to provide. Therefore, if no parking had been provided, the saved money could have been invested to increase employee salaries. The method described in this paper allows employees to gain some of that lost salary back, by driving less.

Providing free or underpriced parking only benefits employees that would drive every day, even if they had a method to recover some of their lost salary.

Methods

The parking is operated on the behalf of the students and employees, as if it were their own business. Those that drive are therefore their own customers.

Charge for parking is proportional to time parked and is charged to the student or employee associated with the car. (A charge rate that is acceptable to all must be established.) For example, if sixty cents per hour is selected, the charging software could round off the parking duration time to the nearest minute and apply a one-cent-per-minute charge. The data-collection method could be implemented with RFID's on cars being detected at parking-lot entrances and exits. (Unauthorized cars coming onto the campus would be identified with license-plate detection and, if a car belonging to a felon is driven onto the campus, a warning notice could be sent to authorities, if this is desired by the school board.)

Earnings (net revenue, minus the cost of collection and distribution) are given to students of driving age and to employees, in proportion to the time they spend at the school (except for the days they were "dropped off", meaning chauffeured; this feature is described in the next paragraph). This could be based on a student's or employee's schedule or, for more accuracy, could be based on "time-at-the-school" data, collected using personal radio frequency identification units (RFIDs) and detectors that are tied to a central, implementing computer. The variables used to compute the amount of money to be paid to a student are shown in Table 1. The corresponding formula is shown in Figure 1. The same approach would be used to compute the earnings of the employees.

Table 1 Variables Used to Compute a Student's Monthly Earnings

Definitions to Compute A Student's Monthly Earnings		
T_{Student}	The Student's Monthly Time at the School	
T_{AllStudents}	Total Monthly Time at School, All Students	
E_{AllStudents}	Total Monthly Earnings from the Student Parking	

Figure 1 Formula Used to Compute a Student's Monthly Earnings

$$E_{\text{Student}} = T_{\text{Student}} * (E_{\text{AllStudents}} / T_{\text{AllStudents}})$$

“Drop off” (chauffeured) policy is as follows. Students may only be dropped off in designated areas. Cars used for this purpose must be authorized and associated with either a student or an employee. For the day that a car is used for drop off or pickup, the student or employee associated with the car accumulates no time at the school, used for the purpose of computing earnings.

Parking statements are automatically sent out monthly, showing the individual's charges and earnings. For students, the net earnings, for those that drive less than the average, could be distributed in the form of a check, or could be deposited to a school-board-created 401K or other type of savings account. This savings account money could then be used for college tuition or awarded to the student when they turn 21 years of age, if that is desired by the school board. Studies have shown that students that have a savings account for college are more likely to attend college.

Implementation

Since this is a new system, it would be prudent for the school board to have the vendor take the full responsibility for operating the system, for the first 10 years. This arrangement would ensure that the vendor would debug the system and continue to look for operational efficiencies, over the 10 year period. A sliding scale of vendor-compensation could be specified in the contract, as follows: The vendor could operate the system for 10% of the revenue, for the first 5 years; 5% of the revenue, for the next 3 years; and 2% of the revenue, for the final 2 years. For example, if it is assumed that, on average, 600 cars are parked for 8 hours, for 200 days per year, at a rate of 50 cents per hour, then the yearly revenue would be \$480,000 per year. The vendor would therefore collect \$240,000 over the first 5 years, \$72,000 over the next 3 years, and \$28,800 over the last two years. Figure 2 shows contact information and excerpts of received emails, from a San Diego vendor. This particular vendor has stated that both the design and the installation of a fully-automated system would be easy to perform.

Experience of Other Schools/Organizations

Table 2 shows nine public schools and two private schools that charge for parking. (It should be noted that the method described here is much more than just “charging for parking”, because the earnings are given back to the students and employees.) Table 3 shows that introducing a price differential into the choice of how often to drive will decrease the amount of driving.

Other Benefits

Depending on the school's location and the size of its access roads, there could be a substantial decrease in local congestion, improving the health of all students. This

parking policy will show neighbors that the administration is working to be a good citizen. This program will encourage active transportation, meaning modes that provide exercise for the students. It will also teach the students the value of parking. It is recommended that the method of determining the selected rate of charge be shared with both the students and the community at large. This program can be thought of as a demonstration project of a new approach to parking.

Figure 2 One Set of Identified-Vendor Information

<p>David R. Carta, Ph.D., CEO TELAERIS Inc. Innovative Solutions and Rapid Development 9123 Chesapeake Dr., San Diego, CA 92123 +1.858.627.9708 : Office +1.858.627.9702 : Fax +1.858.449.3454 : Mobile e-mail: David.Carta@Telaeris.com skype: davidcarta</p>	<p>I reviewed your Intelligent Parking proposal and presentation in their entirety. The identification of vehicles which you suggest for student parking using commercially available RFID technologies is a fairly straightforward process. There are numerous, inexpensive passive (no battery required) RFID tags which have been specifically designed for use on cars and trucks. These tags are installed directly on license plates or windshields, can be read from up to 30 meters away, and can be read as cars drive up to 60 mph. Additionally, automatic license recognition systems, used in conjunction with RFID, can provide a high level of enforcement making it difficult to cheat the system, similar to the Fast Track system which allows tolls to be automatically collected.</p>
	<p>This is not too tough - we probably would integrate with a service that already sends physical mail from a electronic submission instead of re-inventing this wheel.</p>

Green House Gas Impacts

S-3-05 is a California Governor's Executive Order to drop Year 2020 levels of greenhouse gas (GHG) emissions to the level of 1990 emissions and to drop our Year 2050 level of GHG emissions to 80% *below* 1990 levels. If the world achieves similar reductions, the earth's level of atmospheric CO₂ will be capped at 450 parts per million (PPM). Figures 3, 4, and 5 show how large 450 PPM is, compared to values over the last 800 thousand years. Reference 3 shows that the goal of S-3-05 is to limit atmospheric CO₂ to 450 PPM and it also shows that even if this cap is achieved, the risk of a human catastrophe caused by global warming is significant. Reference 4's Figure 1 shows that a significant reduction in driving is critically needed.

Conclusion

Adopting this program will benefit the school in numerous ways. Students will gain an understanding of economics and technology. All members of the school community can

take pride in being part of this pioneering effort to reduce driving and the associated green house gases. It is a demonstration of the fundamental features of Reference 1. It will set an example for other schools and employers.

Table 2 American High Schools that Charge for Parking

Eleven U.S. High Schools that Charge Students to Park						
State	City	County	High School	Price Per year	Link to Price	Link to Location
California	Anaheim	Orange	Servite ¹	\$25	http://www.servitehs.org/apps/pages/index.jsp?uREC_ID=86492&type=d	http://en.wikipedia.org/wiki/Anaheim, California
Illinois	Maple Park	DeKalb	Kaneland	\$150	http://www.kaneland.org/khs/	http://en.wikipedia.org/wiki/Maple Park, Illinois
Minnesota	Andover	Anoka	Andover	\$100	http://www.anoka.k12.mn.us/education/components/docmgr/default.php?sectiondetailid=276465&fileitem=96679&catfilter=24892	http://en.wikipedia.org/wiki/Andover, Minnesota
Wisconsin	German Town	Washington	German Town	\$150	http://www.germantownnow.com/news/92202694.html	http://en.wikipedia.org/wiki/Germantown, Wisconsin
Virginia	Herndon	Fairfax	Herndon	\$200	http://www.fcps.edu/HerndonHS/stud_life/park_reg.htm	http://www.fairfaxcounty.gov/
North Carolina	Holly Springs	Wake	Holly Springs	\$153	http://hollyspringshshs.wcpss.net/Parking/HSHS%20PARKING%20REGULATIONS%202010-2011.pdf	http://en.wikipedia.org/wiki/Holly Springs, North Carolina
New Jersey	Newton	Sussex	Kittatinny Regional	\$50	http://www.krhs.net/new08/ActivityFees.pdf	http://en.wikipedia.org/wiki/Newton, New Jersey
Massachusetts	Ipswich	Essex	Ipswich ¹	\$50	http://www.wickedlocal.com/ipswich/news/x1146471597/Student-parking-fee-set-override-mixed#axzz1Qy0d7dfi	http://en.wikipedia.org/wiki/Ipswich, Massachusetts
Massachusetts	Andover	Essex	Andover	\$200	http://www.aps1.net/DocumentView.aspx?DID=1409	http://en.wikipedia.org/wiki/Andover, Massachusetts
Massachusetts	Palmer	Hampden	Palmer	\$100	http://www.masslive.com/news/index.ssf/2009/09/school_committee_defends_100_p.html	http://en.wikipedia.org/wiki/Palmer, Massachusetts
Connecticut	Stonington	New London	Stonington	\$100	http://www.thewesterlysun.com/mysticriverpress/news/school-board-plans-parking-fees-reassignment/article_d72199e4-9d9f-11e0-8406-001cc4c03286.html	http://en.wikipedia.org/wiki/Stonington, Connecticut
¹ These schools are private. The other nine schools are public.						

Table 3

Eleven Cases of Pricing Impact on the Amount of Driving

Impact of Financial Incentives on Parking Demand			
Location	Scope	1995 dollars per mo.	Parking Use Decrease ¹
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Figure 3

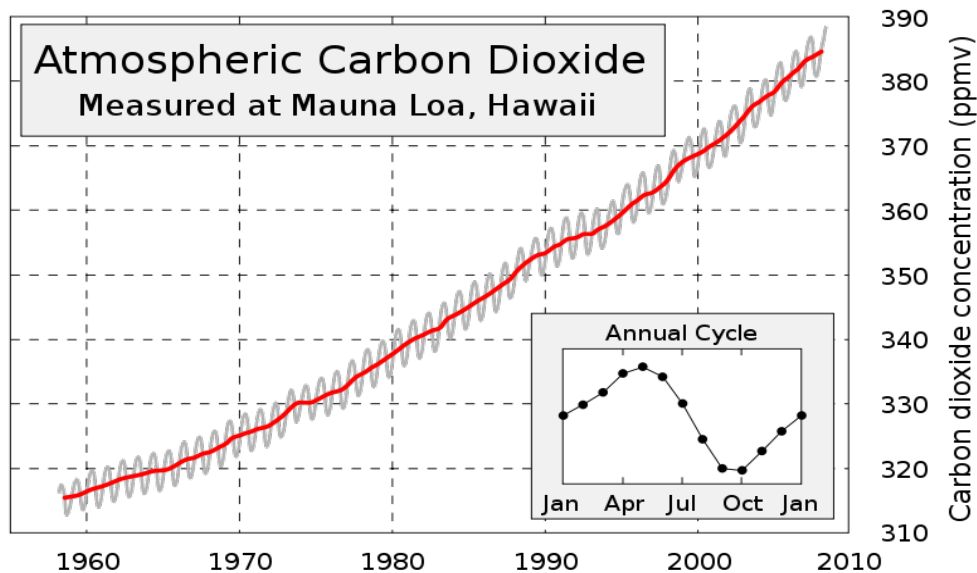
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Figure 4 Atmospheric CO₂ and Mean Temperature, 800,000 Years Ago, with 450 PPM CO₂ Shown

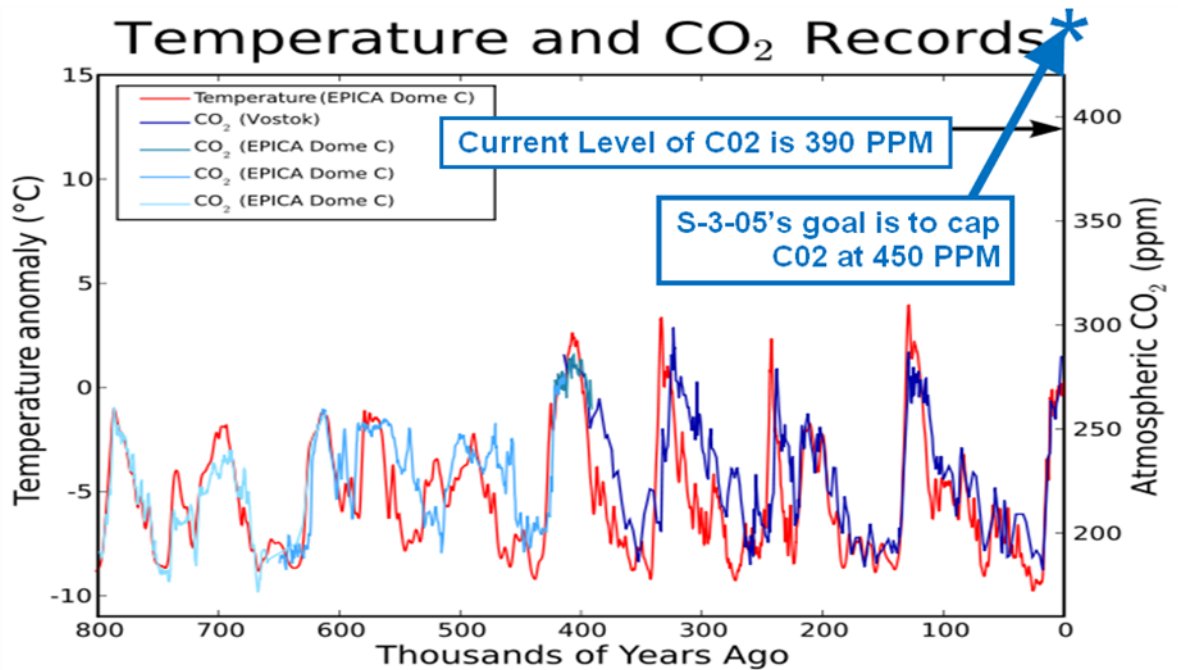
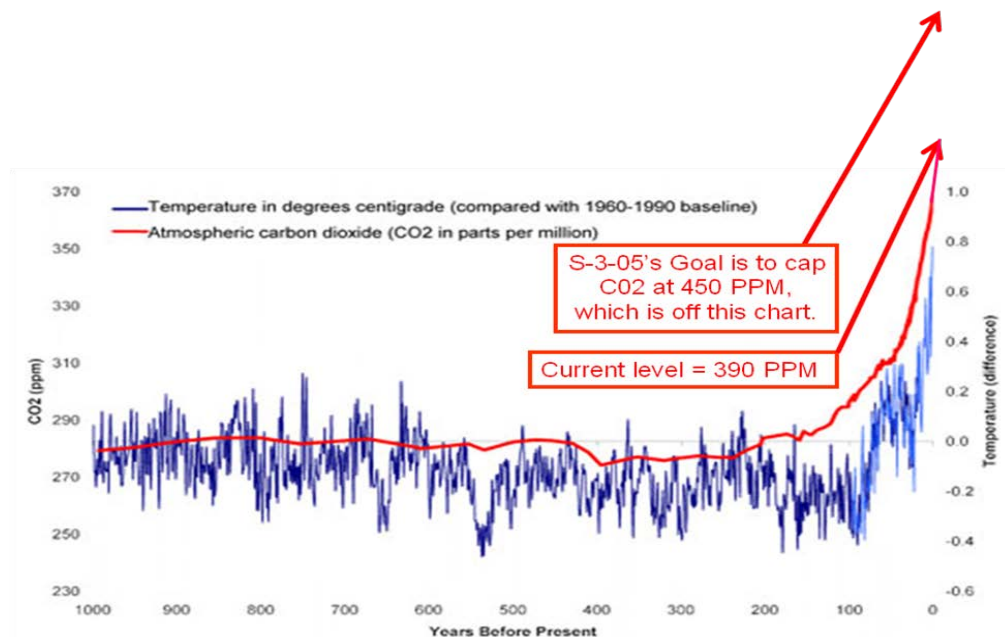


Figure 5 Atmospheric CO₂ and Mean Temperature, Over the Last 1,000 Years



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- 2.) *CarlsbadHS2010_2.pdf*, a “pdf” file of a Power Point file created in 2010, Mike Bullock. Available upon request from Mike Bullock, mike_bullock@earthlink.net
- 3.) Letter from *Center for Biological Diversity*, to Elaine Chang, Deputy Executive Officer of Planning, Rule Development, and Area Sources of the South Coast Air Quality Management District; *Comments on Survey of CEQA Documents on Greenhouse Gas Emissions Draft Work Plan and Development of GHG Threshold of Significance for Residential and Commercial Projects*; April 15, 2009. Available upon request from Mike Bullock, mike_bullock@earthlink.net
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The Development of California Light-Duty Vehicle (LDV) Requirements to Support Climate Stabilization: Fleet-Emission Rates & Per-Capita Driving

Paper #30793

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ABSTRACT

An Introduction to the topic is provided, including the importance of cars and light duty trucks (Light Duty Vehicles, LDVs), and an identification of the top-level LDV requirements.

The fundamentals of our climate crisis are presented, including its cause, its potential for harm, and existing mandates: *California's Executive Order S-3-05*, *California's Global Warming Solutions Act of 2006* (AB 32), and *California's Sustainable Communities and Climate Protection Act* (SB 375). An earlier calculation of a driving reduction target is described.

Reference year 2005 is identified. The latest climate-stabilizing greenhouse-gas (GHG) reduction target value, for 2030, is calculated, using unambiguous statements by recognized climate experts and California's expected 2020 emissions. The formula for GHG emissions, as a function of per-capita driving, population, fleet CO₂ emissions per mile, and low-carbon fuel standards is given. From that expression, a mathematical relationship between defined factors associated with these variables is derived. These factors are the ratio of the value at the specified later year to the reference year. The factor of car-emission-per-mile driven, for year 2015, with respect to year 2005, is obtained.

Internal Combustion Engine (ICE) mileage values from 2000 to 2030 are identified, as either mandates or assumptions. A table is presented that estimates LDV fleet mileage, for year 2015.

Zero Emission Vehicle (ZEV) values to support a calculation of equivalent-fleet mileage with a significant fraction of ZEVs (ZEV LDVs) are given. A table is shown that uses assumptions about ZEVs, ICEs (ICE LDVs), and the fraction of electricity that comes from renewables, to compute the LDV fleet equivalent mileage, for year 2030. This set of assumptions is dubbed the "Heroic-Measures" (HM) case. It includes having the fraction of ZEVs quickly climb up to significant values, while the ICEs, for the years before significant fractions of ZEVs appear, are, to a significant degree, taken off the road or otherwise caused to be driven less, due to assumed strong governmental policies. The equivalent fleet mileage computed by this table is used, with population and the needed factor of emission reductions, to compute a needed per-capita driving reduction, for 2030, with respect to 2005. Policies to achieve this per-capita reduction are described, with reductions allocated to each policy.

The fleet-equivalent mileage for 2030 that would support a 2005 per-capita driving level is computed. A table is constructed to achieve that equivalent mileage. The assumptions in that table are said to define an "extra-heroic-measures" (EHM) case. They would probably be very difficult to achieve. The electricity required to power the HM case is estimated and compared to current usage.

INTRODUCTION

Humanity's top-level requirement is to reduce greenhouse gas (GHG) emissions enough to support stabilizing our climate at a livable level. This top-level requirement must flow down to LDVs, due to the significance of their emissions. As an example, LDVs emit 41% of the GHG in San Diego County¹.

From a systems engineering perspective, the needed requirements are an upper bound on greenhouse gas (GHG) emissions per mile driven (applicable to the entire fleet of LDVs on the road in the year of interest) and an upper bound on per-capita driving, given population growth. This paper will do a calculation of required driving levels, based on calculations of how clean our cars and fuels could be, predicted population growth, and the latest, science-based, climate-stabilizing target. All three categories of LDV emission-reduction strategies will be considered: cleaner cars, cleaner fuels, and less driving.

BACKGROUND: OUR CLIMATE PREDICAMENT

Basic Cause

Our climate crisis exists primarily because of these two facts²: First, our combustion of fossil fuels adds "great quantities" of CO₂ into our atmosphere. Second, atmospheric CO₂ traps heat.

California's First Two Climate Mandates

California's Governor's Executive Order S-3-05³ is similar to the Kyoto Agreement and is based on the greenhouse gas (GHG) reductions recommended by climate scientists for industrialized nations, back in 2005. In 2005, climate scientists believed that the reduction-targets of S-3-05 would be sufficient to support stabilizing Earth's climate at a livable level, with a reasonably high level of certainty. More specifically, this executive order aims for an average, over-the-year, atmospheric temperature rise of "only" 2 degree Celsius, above the preindustrial temperature. It attempts to do this by limiting atmospheric CO₂_e to 450 PPM by 2050 and then reducing emissions further, so that atmospheric levels would come down to more tolerable levels in subsequent years. The S-3-05 emission targets are as follows: 2000 emission levels by 2010, 1990 levels by 2020, and 80% below 1990 levels by 2050.

It was thought that if the world achieved S-3-05, there might be a 50% chance that the maximum temperature rise will be less than 2 degrees Celsius, thus leaving a 50% chance that it would be larger than 2 degrees Celsius. A 2 degree increase would put over a billion people on the planet into a position described as "water stress" and it would mean a loss of 97% of our coral reefs.

There would also be a 30% chance that the temperature increase would be greater than 3 degrees Celsius. A temperature change of 3 degree Celsius is described in Reference 3 as being "exponentially worse" than a 2 degree Celsius increase.

The second California climate mandate is AB 32, the so-called *Global Warming Solutions Act of 2006*. It includes provisions for a cap and trade program, to ensure meeting S-3-05's 2020 target

of the 1990 level of emissions. It continues after 2020. Over all years, AB 32 requires CARB to implement measures that achieve the maximum *technologically feasible and cost-effective* (words taken from AB 32) greenhouse-gas-emission reductions.

California is on track to achieve its second (2020) target. However, the world emission levels have, for most years, been increasing, contrary to the S-3-05 trajectory. Because the world has effectively failed to achieve S-3-05, California, if it still is interested in leading the way to human survival, must do far better than S-3-05, going forward, as will be shown.

Failing to Achieve these Climate Mandates

What if we fail to achieve S-3-05 and AB 32 or we achieve them but they turn out to be too little too late and other states and countries follow our example?

It has been written^{R4} that, “A recent string of reports from impeccable mainstream institutions—the International Energy Agency, the World Bank, the accounting firm of PricewaterhouseCoopers—have warned that the Earth is on a trajectory to warm by at least 4 Degrees Celsius and that this would be incompatible with continued human survival.”

It has also been written^{R5} that, “Lags in the replacement of fossil-fuel use by clean energy use have put the world on a pace for 6 degree Celsius by the end of this century. Such a large temperature rise occurred 250 million years ago and extinguished 90 percent of the life on Earth. The current rise is of the same magnitude but is occurring faster.”

Pictures That Are Worth a Thousand Words

Figure 1 shows (1) atmospheric CO₂ (in blue) and (2) averaged-over-a-year-then-averaged-over-the-surface-of-the-earth world atmospheric temperature (in red). This temperature is with respect to a recent preindustrial value. The data starts 800,000 years ago. It shows that the current value of atmospheric CO₂, which is now over 400 PPM, far exceeds the values of the last 800,000 years. It also shows that we should expect the corresponding temperature to eventually be about 12 or 13 degrees above preindustrial temperatures. This would bring about a human disaster^{3,4,5}.

Figure 2 shows the average yearly temperature with respect to the 1960-to-1990 baseline temperature (in blue). It also shows atmospheric levels of CO₂ (in red). The S-3-05 goal of 450 PPM is literally “off the chart”, in Figure 2. Figure 2 shows that, as expected, temperatures are starting to rise along with the increasing levels of CO₂. The large variations in temperature are primarily due to the random nature of the amount of solar energy being received by the earth.

FURTHER BACKGROUND: CALIFORNIA’S SB 375 AND A PREVIOUS CALCULATION OF HOW MUCH WE CAN DRIVE

As shown in the Introduction, LDVs emit significant amounts of CO₂. The question arises: will driving need to be reduced or can cleaner cars and cleaner fuels arrive in time to avoid such behavioral change? Steve Winkelman, of the Center for Clean Air Policy (CCAP), has worked on this problem. Using CCAP data, an S-3-05-supporting driving reduction, for San Diego County, will be estimated.

SB 375, the Sustainable Communities and Climate Protection Act of 2008

Under SB 375, the California Air Resources Board (CARB) has given each Metropolitan Planning Organization (MPO) in California driving-reduction targets, for the years 2020 and

Figure 1. Atmospheric CO₂ and Mean Temperature from 800,000 Years Ago

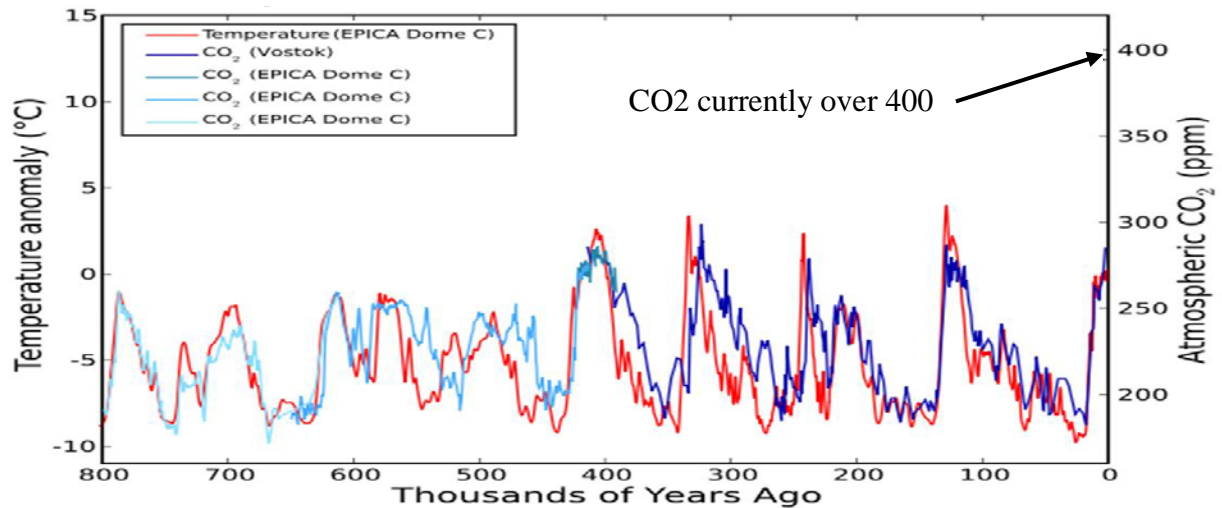
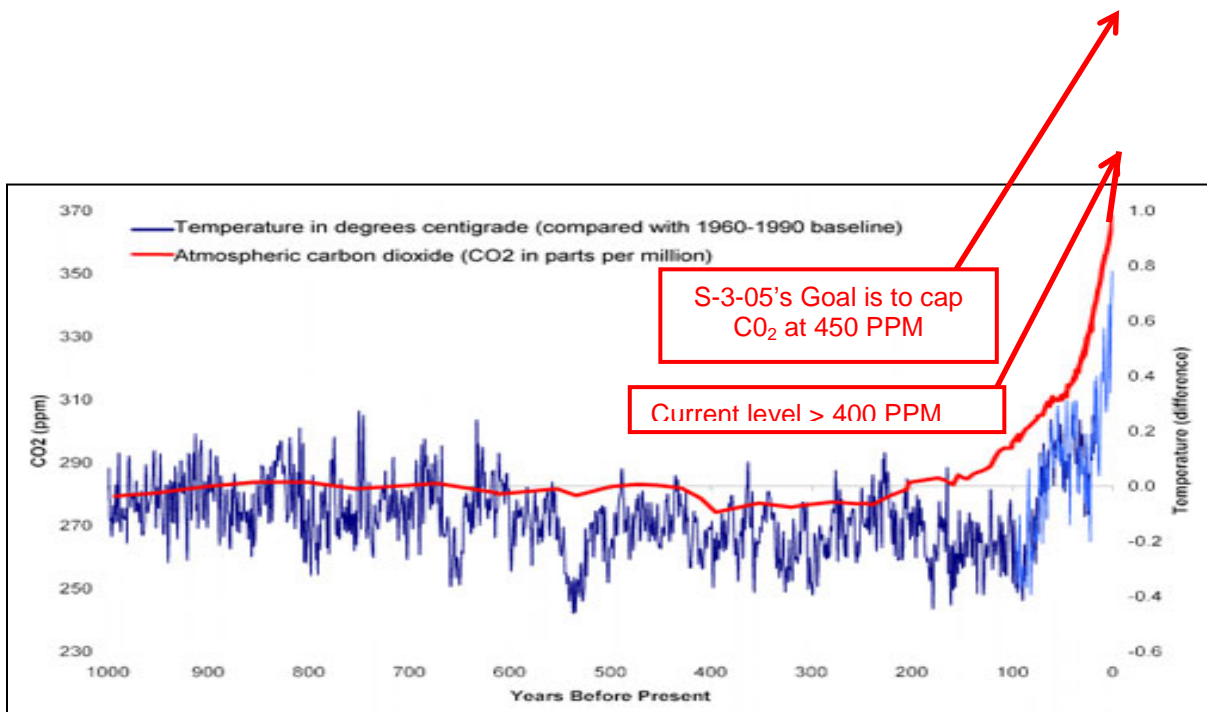


Figure 2. Atmospheric CO₂ and Mean Temperature, Over the Last 1,000 Years



2035. “Driving” means yearly, per capita, vehicle miles travelled (VMT), by LDVs, with respect to 2005. The CARB-provided values are shown at this Wikipedia link,

http://en.wikipedia.org/wiki/SB_375.

Under SB 375, every Regional Transportation Plan (RTP) must include a section called a Sustainable Communities Strategy (SCS). The SCS must include driving reduction predictions corresponding to the CARB targets. Each SCS must include only *feasible* transportation, land use, and transportation-related policy data. If the SCS driving-reduction predictions fail to meet the CARB-provided targets, the MPO must prepare an Alternative Planning Strategy (APS), which must also appear in the MPO's RTP. An APS uses *infeasible* transportation, land use, and transportation-related policy assumptions. The total reductions, resulting from both the SCS and the APS, must at least meet the CARB-provided targets.

Factors Used to Compute the Required Driving Reduction

The definitions in Tables 1 and the two conventions in Table 2 will be used to compute the needed driving reductions, with respect to year 2005, from known and estimated variables and the S-3-05 GHG reductions that were thought to support climate stabilization, back in 2005. By SB 375 convention, Year “*i*”, the reference year, is 2005.

The fractional reduction in per-capita personal driving, with respect to 2005 driving, needed to achieve any desired level of GHG emission, can be computed using predicted population growth and two of the variables shown in Figure 3⁶. The two needed values are the factor with respect to year 2005 of CO₂ emitted per mile driven (the green line, sometimes referred to as “Pavley”, since AB 1493 was authored by Senator Fran Pavley) and the factor with respect to year 2005 of the advantage from achieving the low carbon fuel standards (LCFS, the purple line).

The variables plotted in Figure 3 are the factors which can be used to multiply the 2005 values to get the values for the years shown. For example, in 2030, the CO₂ emitted from the cars and light-duty trucks in California (the dark blue line), can be computed to be 1.12 times as large as it was in 2005. It can also be said that the value will be 12% larger than it was in 2005. Likewise, the green line, which is the average CO₂ emitted per mile driven, for California's fleet of LDVs, is predicted, in 2030, to be .73 times the 2005 value. This means the value is predicted to be reduced 27%, below its 2005 value. Figure 3 also shows that the 1990 value of emissions (on the light blue line) was about 13% less than it was in 2005.

The S-3-05 trajectory is shown as the gold (or dark yellow) line. It is the factors that can be used to convert 2005 values of emissions to values for the years shown. For example in 2030, emissions will need to be 37% lower than they were in 2005, to meet the S-3-05 mandate.

The SB 375 convention is for CARB to require and for the Metropolitan Planning Organizations (MPOs) to estimate and report their predicted per-capita driving reductions. To compute the per-capita driving reduction, the equation for computing the emissions is used. That equation is the product of the following four factors:

- the Low Carbon Fuel Standard, “*L*” (which reduces the CO₂ emitted from each gallon of fuel burned),
- the fleet-average CO₂ per mile driven (using the CO₂ per gallon burned without accounting for “*L*”),

Table 1. Variable Definitions

Variable Definitions	
e_k	LDV Emitted CO2, in Year “ k ”
L_k	Low Carbon Fuel Standard (LCFS) Factor that reduces the Per-Gallon CO2 emissions, in Year “ k ”
C_k	LDV CO2 emitted per mile driven, average, in Year “ k ”, not accounting for the Low Carbon Fuel Standard (LCFS) Factor
c_k	LDV CO2 emitted per mile driven, average, in Year “ k ”, accounting for the Low Carbon Fuel Standard (LCFS) Factor
p_k	Population, in Year “ k ”
d_k	Per-capita LDV driving, in Year “ k ”
D_k	LDV Driving, in Year “ k ”
M_k	LDV Mileage, miles per gallon, in Year “ k ”
m_k	LDV Equivalent Mileage, miles per gallon, in Year “ k ” accounting for Low Carbon Fuel Standard (LCFS) Factor, so this is M_k/L_k
N	Number of pounds of CO2 per gallon of fuel but not accounting for the Low Carbon Fuel Standard (LCFS) Factor

Table 2. Two Conventions

Two Conventions: Variable in a Given Year and Factors to Compute a Variable’s Value in Year “k” from it’s Value in Year “i”	
X_i	Variable “ X ” in year “ i ”
$f_{x_{k/i}}$	Ratio of the value of “ X ” in year “ k ” to the value of “ X ” in Year “ i ”, which could also be expressed as x_k/x_i . Note that this is the factor that could be used to multiply the value in Year “ i ” to get the value in Year “ k ”.

- the per-capita driving, and
- the population. (The per-capita driving multiplied by population gives the miles driven.)

$$e = L * C * d * p \quad (\text{Eq. 1})$$

For Year “ k ”, this is the following:

$$e_k = L_k * C_k * d_k * p_k \quad (\text{Eq. 2})$$

For Year “ i ”, this is the following:

$$e_i = L_i * C_i * d_i * p_i \quad (\text{Eq. 3})$$

Since the two sides of Equation 3 are equal, an equation can be formed by dividing the left side of Equation 2 by the left side of equation 3 and the right side of Equation 2 by the right side of Equation 3. Associating the terms on the right side of this new equation gives Equation 4

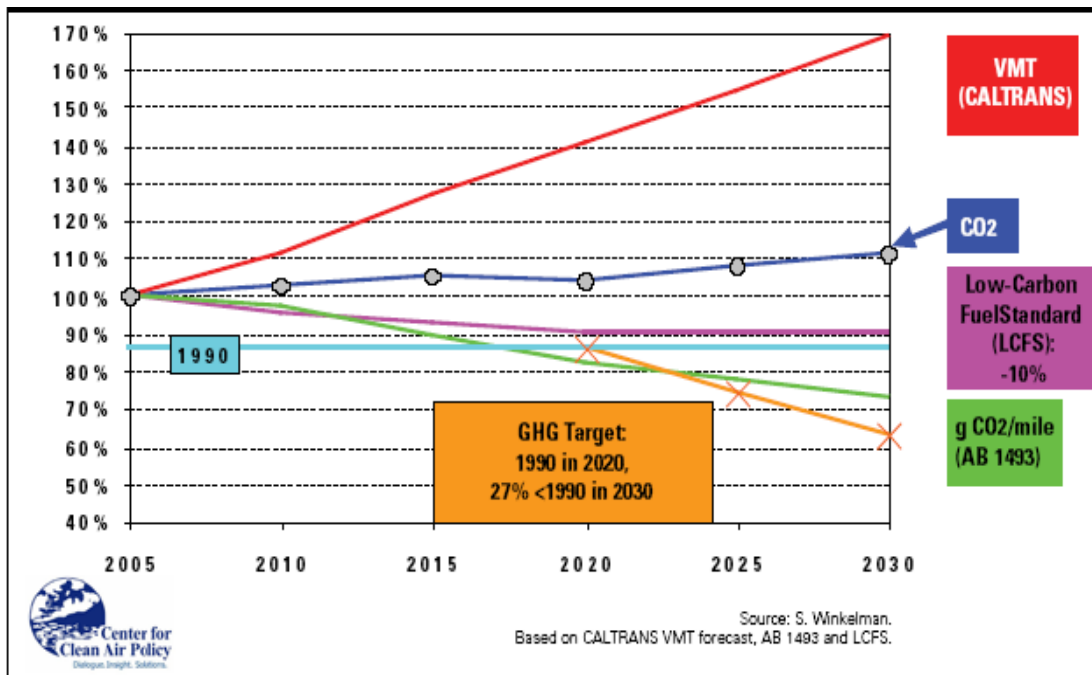
$$\frac{e_k}{e_i} = \frac{L_k}{L_i} * \frac{C_k}{C_i} * \frac{d_k}{d_i} * \frac{p_k}{p_i} \quad (\text{Eq. 4})$$

The convention of the 2nd row of Table 2 can be used to create Equation 5 from Equation 4.

$$f_{e_{k/i}} = f_{L_{k/i}} \times f_{C_{k/i}} \times f_{d_{k/i}} \times f_{p_{k/i}} \quad (\text{Eq. 5})$$

The first factor (from left to right) of the right side of Equation 5 is the purple line of Figure 3; the second factor of Equation 5 is the green line of Figure 3; and the product of the last two factors of

Figure 3 The S-3-05 Trajectory (the Gold Line) AND the CO₂ Emitted from Personal Driving (the Blue Line), where that CO₂ is a Function (the Product) of the California-Fleet-Average CO₂ per Mile (the Green Line), The Predicted Driving (VMT, the Red Line), and the Low-Carbon Fuel Standard (the Purple Line)



the right side of Equation 5 is the red line of Figure 3. Figure 3's, dark-blue-line values are the product of the purple-line values, the green-line values, and the red -line values. For example, in 2030, the dark-blue value of 1.12 can be computed by multiplying the purple-line value of 0.9 times the green-line value of 0.73, times the red-line value of 1.7, times the red-line value of 1.7. As a check, (0.9)*(0.73)*(1.7) = 1.1169, which is reasonably close to the (eye-ball-estimate) value of the dark-blue line, for year 2030, 1.12.

The Required Driving Reduction for San Diego County, for 2035, Using Winkelman's LDV and Fuel Efficiency Values and S-3-05

As described in Footnote 3 of this report, the CARB-supplied targets are per-capita driving reduction targets. Page 8, of http://arb.ca.gov/cc/sb375/staffreport_sb375080910.pdf, says, “The RTAC recommended that targets be expressed as a percent reduction in per-capita greenhouse gas emissions from a 2005 base year”. However, Footnote 3 applies.

The Key Relationship and Derivation of the Needed Formula

They key relationship is Equation 5. Solving for the fractional reduction in per-capita driving, with respect to 2005, results in Equation 6.

$$f_{d_{k/i}} = \frac{f_{e_{k/i}}}{f_{L_{k/i}} \times f_{c_{k/i}} \times f_{p_{k/i}}} \quad (\text{Eq. 6})$$

This driving reduction is a per-capita value, matching the convention of the CARB-supplied target.

Getting the Values to Use in the Equation

Figure 3 will supply all of the needed values, except for the factor of population. Neither Figure 3’s red-line values nor its blue-line values are used.

Getting the Net Factor of the Emissions of GHG, for Year 2035, With Respect to 2005

To get the factor of the emissions of GHG, for year 2035, with respect to year 2005, it is necessary to extrapolate the Governor’s Executive Order target values (the gold line of Figure 3), out to year 2035. Figure 3’s gold line shows that this factor is 0.87 in 2020 and is 0.64 in 2030. Therefore, in year 2035, the factor will be

$$0.64 + [(.64 - .87) / (2030-2020)] * (2035-2030) = 0.525$$

Getting the (Pavley) Factor of the Average CO2 per Mile Driven, in 2035, with Respect to 2005

To get the Pavley reduction factor, for Year 2035, it is necessary to extrapolate the average CO2 per mile driven, which is Figure 3’s green line, out to Year 2035. It is 0.82 in 2020 and it is 0.73 in 2030. Therefore, in Year 2035 the statewide mileage factor data will be

$$0.73 + [(.73 - .82) / (2030-2020)] * (2035-2030) = 0.685$$

Getting the Factor of the Reduction of GHG Due to Fuels that Burn less Carbon

To get the factor of the reduction of GHG due to fuels that burn less carbon, it is only necessary to observe the purple line of Figure 3. It indicates that the factor will be 0.9 in 2035.

Getting the Factor of the Increase in Population

The factor for population in San Diego County is computed using the populations estimated in CARB’s <http://arb.ca.gov/cc/sb375/mpo.co2.reduction.calc.pdf>, namely 3,034,388 people in 2005 and 3,984,753 people in 2035. So the factor, from 2005 to 2035 is 3,984,753/3,034,388 = 1.313.

Computing the Required Per-Capita Driving Reduction, for 2035

These 4 values are used in Eq. 6, to compute the required factor of per-capita driving (VMT), for 2035, with respect to 2006.

$$f_{d_{k/i}} = .525 \div (.685 \times 0.9 \times 1.313)$$

Therefore, $f_{d_{k/i}} = f_{Per\ Capita\ VMT} = .649.$

This corresponds to a 35.1% reduction in per-capita driving, in year 2035, compared to 2005.

Computing the Net Amount of Driving, in 2035, Compared to 2005 and its Significance

The net factor of driving in 2035, compared to 2005, is the product of the per-capita factor of driving (.649, as just computed) and the factor of population change (1.313, as computed above).

Factor of net driving in 2035 compared to 2005:

$$f_{VMT} = .649 \times 1.313 = 0.8515.$$

Based on this set of assumptions, even though San Diego County's population would grow by 31.3%, from 2005 to 2035, the people would have to drive 15% less than they did in 2005.

THE DEVELOPMENT OF CALIFORNIA'S TOP-LEVEL LDV REQUIREMENTS TO SUPPORT CLIMATE STABILIZATION

The above work is obsolete due to our latest understanding of how fast emissions will need to be reduced. It is also clear that cleaner cars will be needed and can probably be achieved. As will be seen, much cleaner cars will be needed if driving reductions are going to remain within what many people would consider achievable. Mileage and equivalent mileage will need to be specified. Some of the above equations will need to be modified, since a significant fleet-fraction of Zero-Emission Vehicles (ZEVs, either Battery-Electric LDVs or Hydrogen Fuel Cell LDVs) will be needed and mileage and equivalent mileage will be used instead of CO2 per mile driven.

Since the SB-375 work used 2005 as the reference year, it will remain the reference year here.

GHG Target to Support Climate Stabilization

The primary problem with S-3-05 is that California's resolve and actions have been largely ignored by other states, our federal government, and many countries. Therefore, rather than achieving 2000 levels by 2010 and being on a track to achieve 1990 levels by 2020, world emission have been increasing. Reference 7 states on Page 14 that the required rate of reduction, if commenced in 2020, would be 15%. That rate means that the factor of 0.85 must be achieved, year after year. If this were done for 10 years, the factor would be $(0.85)^{10} = 0.2$. We don't know where world emissions will be in 2020. However, it is fairly safe to assume that California will be emitting at its 1990 level in 2020, in accordance with S-3-05. This situation shows that the correct target for California is to achieve emissions that are reduced to 80% below California's 1990 value by 2030. Note that if the reductions start sooner, the rate of reduction of emissions can be less than 15% and the 2030 target could be relaxed somewhat. However, it is doubtful that the world will get the reduction rate anywhere near the needed 15% by 2020. Therefore, the target, of 80% below 1990 levels by 2030 is considered to be correct for California. Reference 7 also calls into question the advisability of aiming for a 2 degree Celsius increase, given the possibilities of positive feedbacks that would increase warming. This concern for positive feedbacks is another reason that this paper will work towards identifying LDV requirement sets that will support achieving 80% below 1990 values by 2030.

Using the top-row definition in Table 1, and this requirement, results in the following equation.

$$\frac{e_{2030}}{e_{1990}} = 0.2 \quad (\text{Eq. 7})$$

From Figure 3,

$$\frac{e_{1990}}{e_{2005}} = 0.87 \quad (\text{Eq. 8})$$

Multiplying the equations together give the following:

$$\frac{e_{2030}}{e_{2005}} = 0.87 \times 0.2 = .174 \quad (\text{Eq. 9})$$

Using the convention shown in Table 2 gives this equation:

$$f_{e_{2030/2005}} = .174 \quad (\text{Eq. 10})$$

How Miles-Per-Gallon (MPG) Updates the LDV Efficiency Estimates

The number of pounds of CO₂ per mile driven, defined as “C” in Table 1, is equal to the number of pounds of CO₂, per gallon of fuel, divided by the number of miles travelled on that gallon of fuel. However, in different years, this amount can change from the standard value of “N” as defined in the last line of Table 1, because of the Low Carbon Fuel Standard. Therefore, using the definitions in Table 1, the following equation can be written:

$$c_k = \frac{NxL_k}{M_k} \quad (\text{Eq. 11})$$

For the baseline year “i”, this is the following:

$$c_i = \frac{NxL_i}{M_i} \quad (\text{Eq. 12})$$

Using Table 1’s definition of mileage that accounts for the Low Carbon Fuel Standard gives these equations, since $m = M/L$:

$$c_k = \frac{N}{m_k} \quad (\text{Eq. 13})$$

$$c_i = \frac{N}{m_i} \quad (\text{Eq. 14})$$

Using Table 2’s second convention and dividing Equation 13 by Equation 14 gives:

$$f_{c_{k/i}} = \frac{c_k}{c_i} = \frac{m_i}{m_k} \quad (\text{Eq. 15})$$

This shows that to get the factor to convert CO₂-emission-per-mile from the baseline value to a future-time value, the new value is divided by the baseline value. However, if the mileage values are used, the baseline value must be divided by the newer value.

It is also useful to use an intermediate year to get the factor from the baseline year to the year of interest. This can be done by using Equation 13 for different years to result in Equation 14 and Equation 15, where “j” denotes the intermediate year.

$$f_{c_{j/i}} = \frac{m_i}{m_j} \quad (\text{Eq. 14})$$

$$f_{c_{k/j}} = \frac{m_j}{m_k} \quad (\text{Eq. 15})$$

Multiplying these equations together results in Equation 16.

$$f_{c_{j/i}} \times f_{c_{k/j}} = \frac{m_i}{m_j} \times \frac{m_j}{m_k} = \frac{m_i}{m_k} \quad (\text{Eq. 16})$$

Recognizing the right side of Equation 16 shows that these factors can be strung together, as shown by Equation 17, which is a direct result of Equation 16.

$$f_{c_{k/i}} = f_{c_{j/i}} \times f_{c_{k/j}} \quad (\text{Eq. 17})$$

Since the low carbon fuel standard has been incorporated into the carbon emission per mile parameter, “c”, the following equations result, using the definitions of Table 1.

For Year “k”, this is the following:

$$e_k = c_k * d_k * p_k \quad (\text{Eq. 18})$$

For Year “i”, this is the following:

$$e_i = c_i * d_i * p_i \quad (\text{Eq. 19})$$

Since the two sides of Equation 19 are equal, an equation can be formed by dividing the left side of Equation 18 by the left side of equation 19 and the right side of Equation 18 by the right side of Equation 19. Associating the terms on the right side of this new equation gives Equation 4

$$\frac{e_k}{e_i} = \frac{c_k}{c_i} * \frac{d_k}{d_i} * \frac{p_k}{p_i} \quad (\text{Eq. 20})$$

The convention of the 2nd row of Table 2 can be used to create Equation 5 from Equation 4.

$$f_{e_{k/i}} = f_{c_{k/i}} \times f_{d_{k/i}} \times f_{p_{k/i}} \quad (\text{Eq. 21})$$

This can be expanded by using Equation 17 to give the following.

$$f_{e_{k/i}} = f_{c_{j/i}} \times f_{c_{k/j}} \times f_{d_{k/i}} \times f_{p_{k/i}} \quad (\text{Eq. 22})$$

For the purposes here, the intermediate year “j” is 2015 and, recalling that “c” takes into account the Low Carbon Fuel Standard, Figure 3 shows that the following is true, where 0.9 is taken (eyeballed) from the green line at 2015 and the .93 is taken (eyeballed) from the purple line.

$$f_{c_{j/i}} = 0.9 \times 0.93 = 0.837 \quad (\text{Eq. 23})$$

Using Equation 22, to solve for the per-capita driving-reduction factor, results in Equation 24.

$$f_{d_{k/i}} = \frac{f_{e_{k/i}}}{f_{c_{j/i}} \times f_{c_{k/j}} \times f_{p_{k/i}}} \quad (\text{Eq. 24})$$

Reference 8 shows that California’s population in 2005 was 35,985,582. Reference 9 shows that California’s population in 2030 is predicted to be 44,279,354. Therefore,

$$f_{p_{k/i}} = 44279354 \div 35985582 = 1.2305 \quad (\text{Eq. 25})$$

Using the values in Equation 10, 23, and 25 gives Equation 26, where “j” is the intermediate year of 2015 and Equation 15 is also used.

$$f_{d_{k/i}} = \frac{0.174}{0.837 \times \frac{m_j}{m_k} \times 1.2305} \quad (\text{Eq. 26})$$

Evaluating the values shown and with j = 2015 and k = 2030 gives Equation 27.

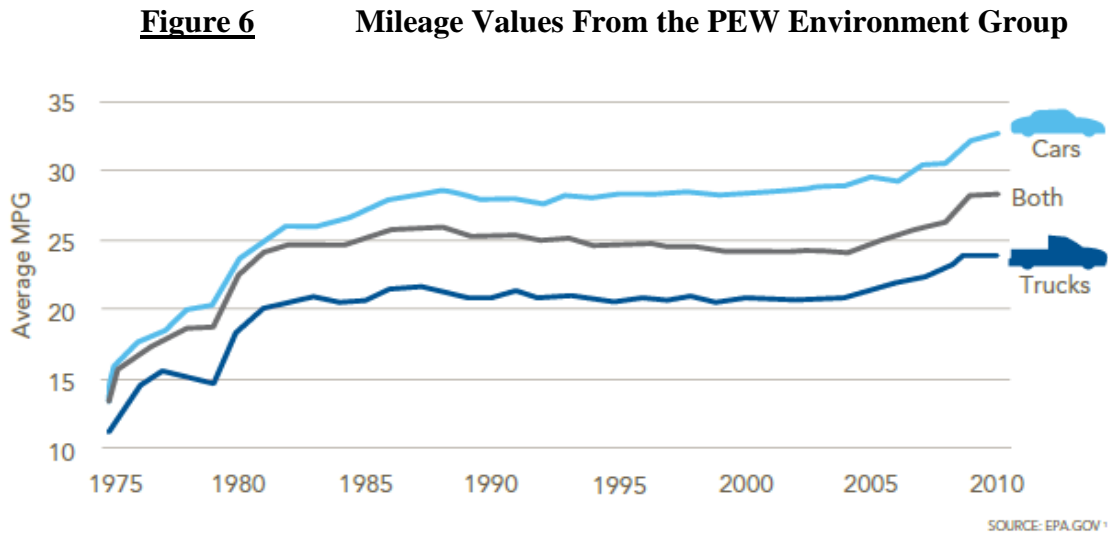
$$f_{d_{k/i}} = 0.1689 \times \frac{m_{2030}}{m_{2015}} \quad (\text{Eq. 27})$$

If the per-capita driving factor was 1 (no per-capita driving reduction needed from 2005 to 2030), the 2030 fleet (all LDVs on the road) mileage would need to exceed the 2015 fleet mileage by a factor of 1 divided by 0.1689, which is 5.92. For example, if the mileage for the 2015 fleet is 25 MPG, then the 2030 value would need to be 148 MPG. Clearly, most LDVs in 2030 will need to be ZEVs.

Internal Combustion Engine (ICE) Mileage, from Year 2000 to Year 2030

The years from 2000 to 2011 are taken from a plot produced by the PEW Environment Group, <http://www.pewtrusts.org/en/research-and-analysis/fact-sheets/2011/04/20/driving-to-545-mpg-the-history-of-fuel-economy>

The plot is shown here as Figure 6. The “Both” values are used.



The values from 2012 to 2025 are taken from the US Energy Information Agency (EIA) as shown on their website, http://www.eia.org/federal/executive/vehicle-standards#ldv_2012_to_2025. They are the LDV Corporate Average Fleet Efficiency (CAFE) values enacted into law in the first term of President Obama. From 2025 to 2030, it is assumed that the yearly ICE improvement in CAFE will be 2.5 MPG.

Mileage of California’s LDV Fleet in 2015

Table 3 uses these values of ICE mileage to compute the mileage of the LDV fleet in 2015. It assumes that the fraction of ZEVs being used over these years is small enough to be ignored. The 100 miles driven, nominally, by each set of cars, is an arbitrary value and inconsequential in the final calculation, because it will divide out. It is never-the-less used, so that it is possible to compare the gallons of fuel used for the different years. The “f” factor could be used to account for a set of cars being driven less. It was decided to not use this option by setting all of the values to 1. The Low Carbon Fuel Standard (LCFS) values are taken from Figure 3. The gallons of fuel are computed as shown in Equation 28, using the definition for L_k that is shown in Table 1.

$$\text{Gallons Used per } f * 100 \text{ miles} = \frac{f \times 100}{(\text{CAFE MPG}) / L_k} \quad (\text{Eq. 28})$$

How ICE Mileage Values Will Be Used with ZEV Equivalent Mileage Values

As will be seen, after 2015, the net (computed using both ICEs and ZEVs) mileage values for each year are assumed to greatly improve by having a significant fraction of ZEVs. The ICE CAFÉ standards are used in this report as just the ICE contribution to fleet MPG. The ICE MPG values are inadequate by themselves and will therefore need to become less important because ZEVs will need to quickly take over the highways.

Federal requirements will need to change dramatically. Currently, federally-mandated corporate average fuel efficiency (CAFÉ) standards have been implemented, from 2000 to 2025. These standards require that each corporation produce and sell their fleet of cars and light-duty trucks in the needed proportions, so that the combined mileage of the cars they sell, at least meet the specified mileage.

Table 3. Calculation of the Fleet MPG for 2015

LDV Set	Years Old	Model Year	CAFE MPG	LCFS Factor L_{Year}	Factor Driven f	Gallons Used Per $f \times 100$ Miles
1	14-15	2001	24.0	1.0	1.0	4.17
2	13-14	2002	24.0	1.0	1.0	4.17
3	12-13	2003	24.0	1.0	1.0	4.17
4	11-12	2004	24.0	1.0	1.0	4.17
5	10-11	2005	25.0	1.0	1.0	4.00
6	9-10	2006	25.7	.9933	1.0	3.87
7	8-9	2007	26.3	.9867	1.0	3.75
8	7-8	2008	27.0	.9800	1.0	3.63
9	6-7	2009	28.0	.9733	1.0	3.48
10	5-6	2010	28.0	.9667	1.0	3.45
11	4-5	2011	29.1	.9600	1.0	3.30
12	3-4	2012	29.8	.9533	1.0	3.20
13	2-3	2013	30.6	.9467	1.0	3.09
14	1-2	2014	31.4	.9400	1.0	2.99
15	0-1	2015	32.6	.9333	1.0	2.86
Sum of Gallons:						54.29
Miles = 100*Sum(f's):						1500
MPG = Miles/(Sum of Gallons):						27.63

The car companies want to maximize their profits while achieving the required CAFÉ standard. In California, the car companies will already be required to sell a specified number of electric vehicles, which have a particularly-high, equivalent-value of miles-per-gallon. If the laws are not changed,

this will allow these companies to sell more low-mileage, high profit cars and light-duty trucks, and still achieve the federal CAFÉ standard.

It will be better to apply the CAFÉ standards to only the ICEs and then require that the fleet of LDVs sold achieve some mandated fraction of ZEVs. The ZEVs will get better and better equivalent mileage, as our electrical grid is powered by more renewables. Therefore, their equivalent mileage is not fixed, but will improve over the years. Requirements developed here are for 2030. Therefore a high percentage of all the electricity generated in the state, including both the “in front of the meter” (known as the “Renewable Portfolio Standard” or “RPS”) portion and the “behind the meter” portion is assumed to come from sources that do not emit CO₂. The value of 80% is assumed.

ZEV Equivalent Mileage Values

To calculate the mileage of the 2030 fleet of LDVs, it is necessary to derive a formula to compute the equivalent mileage of ZEVs, as a function of the percent of electricity generated without emitting CO₂, the equivalent ZEV mileage if the electricity is from 100% fossil fuel, and the equivalent ZEV mileage if the electricity is from 100% non-CO₂ sources. The variables defined in Table 4 are used.

Table 4. Variables Used in the Calculation of ZEV Equivalent Mileage

Variable	Definition
m_z	ZEV Equivalent mileage
m_{zr}	ZEV Equivalent mileage if the electricity is from renewables
m_{zf}	ZEV Equivalent mileage if the electricity is from fossil fuels
r	fraction of electricity generated from sources not emitting CO ₂
G	Gallons of equivalent fuel used
D	Arbitrary distance travelled
Num	$m_{zr} \times m_{zf}$
Den	$r \times m_{zf} + (1 - r) \times m_{zr}$

The derivation of the equation for equivalent ZEV mileage is based on the notion that the ZEV can be imagined to travel “r” fraction of the time on electricity generated from renewables and “(1-r)” fraction of the time on fossil fuel. If the vehicle travels “D” miles, then, using the definitions shown in Table 4, the following equation can be written.

$$G = \frac{r \times D}{m_{zr}} + \frac{(1-r) \times D}{m_{zf}} \quad (\text{Eq. 29})$$

$$m_z = D/G = D / \left(\frac{r \times D}{m_{zr}} + \frac{(1-r) \times D}{m_{zf}} \right) \quad (\text{Eq. 30})$$

Dividing the numerator and the denominator by D and multiplying them both by the product of the two equivalent mileage values results in Equations 31.

$$m_z = m_{zr} \times m_{zf} / (r \times m_{zf} + (1 - r) \times m_{zr}) \quad (\text{Eq. 31})$$

Again, using the definitions in Table 4 results in the following.

$$m_z = \text{Num}/(\text{Den}) \quad (\text{Eq. 32})$$

Table 5 shows an assignment of assumed values and the result of a calculation, using Equations 31 and 32, to produce a ZEV equivalent mileage.

Table 5. Variable Assignment and the Resulting ZEV Mileage

m_{zr}	m_{zf}	r	1-r	Num	Den	m_z
5000	70	0.8	0.2	350000.00	1056.00	331.44

Computing an LDV Fleet Mileage Assuming Heroic Measures (HM)

Table 6 shows the additional definitions that will be used in this calculation. Table 7 computes the 2030 LDV mileage, assuming “Heroic Measures” to reduce the miles driven in poor-mileage ICE’s, in building and selling a significant fraction of ZEVs, and in getting the Low Carbon Fuel Standards to continue to improve beyond the Table 3 minimum of 0.90.

Table 6. Additional Variables Used in the Calculation of 2030 LDV Mileage

Variable	Definition
D_i	Distance travelled by ICE vehicles
D_z	Distance travelled by ZEVs
G_i	Gallons of Equivalent fuel used by ICE vehicles
G_z	Gallons of Equivalent fuel used by ZEVs

As shown by the values for “F”, government policies must be adopted to reduce the miles driven by the ICE’s, from 2016 to 2023. The 2016 model ICE’s are driven only 30% as much as the nominal amount. The 2017 year ICE’s can be driving 10% more. This rate of change continues up to 2023, when the ICE’s are doing less damage, due to the large fraction of ZEVs on the road.

As shown, the ZEV fraction of the fleet assumes the value of 5%, just 4 years from now. It then proceeds upward, to 10% in 2019, 25% in 2020, 40% in 2021, and so on, until it reaches 95%.

Achieving these fractions of ZEVs might be compared to what was done during World War II, when automobile productions lines were rapidly converted to produce tanks. This reduced the new cars that could be purchased. Besides this, rationing gasoline made it difficult to drive at times and, due to shortages of leather, which was being used to produce boots for soldiers, some citizens found it hard to even buy shoes. These rapid and inconvenient changes were tolerated, because most people agreed that the war needed to be won. The heroic measures assumed here may not be possible unless citizens and the political leaders they elect understand the dire consequences of climate destabilization and therefore accept, and even demand, the measures that are needed to support climate stabilization.

The equivalent miles per gallon of the LDV fleet in 2030, specifically 111.12 miles per gallon, will be considered as a potential 2030 LDV requirement.

Computing the Heroic-Measures (HM) Case Per-Capita and Net Driving Factor Requirements, Based on the Result Shown in Table 7

Plugging the

- equivalent MPG of the LDV fleet in Year 2030, taken from the bottom of Table 7, which is 111.12 MPG, and
- the MPG of the LDV fleet in Year 2015, taken from the bottom of Table 3, which is 27.63 MPG,

into Equation 27, gives the following result:

$$f_{d_{k/i}} = 0.1689 \times \frac{m_{2030}}{m_{2015}} = .1689 \times \frac{111.12}{27.63} = .6795 \quad (\text{Eq. 31})$$

This means that the per-capita driving will need to be about 32% less than in year 2005. The net driving can be computed by multiplying the per-capita driving, 0.6795, by the population factor of 1.2305, computed in Equation 25, resulting in 0.8361. This means that, even with the 23% increase in California's population, the net driving will have to drop by about 16%. If this LDV requirement set is selected, all of California's transportation money can be used to improve transit, improve active transportation (mainly walking and biking), and maintain, but not expand, roads.

Computing LDV Requirements that Support 2005 Per-Capita Driving

The first step is to use Equation 27 and the value of the mileage in 2015 to compute the needed LDV equivalent fleet mileage for 2030 so that $f_{d_{k/i}}$ is equal to 1.0.

Table 7. Calculation of 2030 LDV Mileage Assuming Heroic Measures

Year	ICE Parameters and Calculations						ZEVs			Yearly Totals		
	CAFÉ MPG	LCFS	Eq. MPG	f	D_i	G_i	z	D_z	G_z	Total Miles	Total Gallons	2030 MPG
2016	34.3	.9267	37.01	.3	30.0	.8105	0	0	.000	30.0	.8105	37.01
2017	35.1	.9200	38.15	.4	40.0	1.0484	0	0	.000	40.0	1.0484	38.15
2018	36.1	.9133	39.53	.5	47.5	1.2018	.05	5	.015	52.5	1.2168	43.14
2019	37.1	.9000	40.92	.6	54.0	1.3197	.10	10	.030	64.0	1.3498	47.41
2020	38.3	.8500	42.56	.7	52.5	1.2337	.25	25	.075	77.5	1.3091	59.20
2021	40.3	.8000	47.41	.8	48.0	1.0124	.40	40	.121	88.0	1.1331	77.66
2022	42.3	.8000	52.88	.9	40.5	.7660	.55	55	.166	95.5	.9319	102.48
2023	44.3	.8000	55.38	1.0	30.0	.5418	.70	70	.211	100.0	.7530	132.81
2024	46.5	.8000	58.13	1.0	15.0	.2581	.85	85	.257	100.0	.5145	194.36
2025	48.7	.8000	60.88	1.0	5.0	.0821	.95	95	.287	100.0	.3688	271.18
2026	51.2	.8000	64.00	1.0	5.0	.0781	.95	95	.287	100.0	.3648	274.16
2027	53.7	.8000	67.13	1.0	5.0	.0745	.95	95	.287	100.0	.3611	276.92
2028	56.2	.8000	70.25	1.0	5.0	.0712	.95	95	.287	100.0	.3578	279.48
2029	58.7	.8000	73.38	1.0	5.0	.0681	.95	95	.287	100.0	.3548	281.87
2030	61.2	.8000	76.50	1.0	5.0	.0654	.95	95	.287	100.0	.3520	284.10
Sum of Miles and then Gallons of Equivalent Fuel:										1247.5	11.23	
Equivalent MPG of LDV Fleet in 2030:										111.12		

Sum of ZEV Miles = 860. Fraction of Miles Driven by ZEVs = 68.9%

$$m_{2030} = f_{d_{k/j}} \times \frac{m_{2015}}{0.1689} = 1.0 \times \frac{27.63}{0.1689} = 163.54 \text{ MPG} \quad (\text{Eq. 32})$$

Table 8 is constructed, with the fraction of ZEVs selected to achieve the needed equivalent fleet mileage of about 163.54 MPG. Since its ZEV fractions are larger and sooner than in the “Heroic Measures table, Table 8 is the “Extra-Heroic Measures” (EHM) case. The ICE “f” values are unchanged; as are the LCFS values. The EHM ZEV differences from the HM case are the highlighted “z” values.

This means that with the 23% increase in California’s population, computed in Equation 25, the net driving would also increase by 23%. If this LDV requirement set were to be implemented, a lot of California’s transportation money will be needed to expand the highway system, leaving less to improve transit, improve active transportation (mainly walking and biking), and maintain roads.

Comparing the ZEV Fraction Values of the “Heroic-Measures” (HM) Case to the “Extra-Heroic Measures” (EHM) Case

Table 9 shows the direct comparison of the ZEV fractions that are ZEV requirements for the HM Case and the EHM Case. The differences are highlighted.

ACHIEVING THE REQUIRED DRIVING REDUCTION OF THE HEROIC-MEASURES (HM) CASE

As shown in Equation 31, in 2030, the per-capita driving will need to at least 32% below the 2005 value. As shown in this link, http://en.wikipedia.org/wiki/SB_375, California’s Metropolitan Planning Organizations (MPOs) are adopting Region Transportation Plans (RTPs) that will achieve reductions in year 2020 and 2035. As also shown there, the targets, for year 2035, range from 0% for Shasta to 16% for Sacramento Area Council of Governments Since this is for 2030 instead of 2035, and to be reasonably conservative, it is assumed here that the state will achieve a 10% reduction in per-capita driving, in 2030, compared to 2005. This leaves 22% to be achieved by new programs.

The title of each of the following subsections contains the estimated per-capita driving reduction each strategy will achieve, by 2030.

Reallocate Funds Earmarked for Highway Expansion to Transit and Consider Transit-Design Upgrades (3%)

San Diego County has a sales tax measure called “TransNet”, which allocates one-third for highway expansion, one-third for transit, and one-third for road maintenance. It has a provision that allows for a reallocation of funds, if supported by at least two-thirds of SANDAG Board members, including a so-called weighted vote, where governments are given a portion of 100 votes, proportional to their population. It is hereby proposed to reallocate the TransNet amount, earmarked for highway expansion, to transit and to do similar reallocations throughout California.

This money could be used to fund additional transit systems; improve transit operations; and/or the redesign and implementation of the redesign of existing transit systems. The redesign could include electrification and automation or even upgrading to a different technology.

A Comprehensive Road-Use Fee Pricing and Payout System to Unbundle the Cost of Operating Roads (7.5%)

Comprehensive means that pricing would be set to cover all costs (including road maintenance and externalities such as harm to the environment and health); that privacy and the interests of low-income drivers doing necessary driving would be protected; that the incentive to drive fuel-efficient cars would be at least as large as it is under the current fuels excise tax; and, as good technology becomes available, that congestion pricing is used to protect critical driving from congestion.

The words *payout* and *unbundle* mean that some of the money collected would go to people that are losing money under the current system.

User fees (gas taxes and tolls) are not enough to cover road costs¹⁰ and California is not properly maintaining its roads. Reference 10 shows that in California user fees amount to only 24.1% of what is spent on roads. Besides this, the improved mileage of the ICEs and the large number of ZEVs needed mean that gas tax revenues will drop precipitously.

Table 8. Calculation of 2030 LDV Mileage Assuming Extra-Heroic Measures

Year	ICE Parameters and Calculations						ZEVs			Yearly Totals		
	CAFÉ MPG	LCFS	Eq. MPG	f	D_i	G_i	z	D_z	G_z	Total Miles	Total Gallons	2030 MPG
2016	34.3	.9267	37.01	.3	30.0	.8105	.00	0	.000	30.0	.8105	37.01
2017	35.1	.9200	38.15	.4	36.0	.9436	.10	10	.030	46.0	.9738	47.24
2018	36.1	.9133	39.53	.5	35.0	.8855	.30	30	.091	65.0	.9760	66.60
2019	37.1	.9000	40.92	.6	30.0	.7332	.50	50	.151	80.0	.8840	90.50
2020	38.3	.8500	42.56	.7	21.0	.4935	.70	70	.211	91.0	.7047	129.14
2021	40.3	.8000	47.41	.8	8.0	.1687	.90	90	.272	98.0	.4403	222.59
2022	42.3	.8000	52.88	.9	4.5	.0851	.95	95	.287	95.5	.3717	267.66
2023	44.3	.8000	55.38	1.0	5.0	.0903	.95	95	.287	100.0	.3769	265.31
2024	46.5	.8000	58.13	1.0	5.0	.0860	.95	95	.287	100.0	.3727	268.35
2025	48.7	.8000	60.88	1.0	5.0	.0821	.95	95	.287	100.0	.3688	271.18
2026	51.2	.8000	64.00	1.0	5.0	.0781	.95	95	.287	100.0	.3648	274.16
2027	53.7	.8000	67.13	1.0	5.0	.0745	.95	95	.287	100.0	.3611	276.92
2028	56.2	.8000	70.25	1.0	5.0	.0712	.95	95	.287	100.0	.3578	279.48
2029	58.7	.8000	73.38	1.0	5.0	.0681	.95	95	.287	100.0	.3548	281.87
2030	61.2	.8000	76.50	1.0	5.0	.0654	.95	95	.287	100.0	.3520	284.10
Sum of Miles and then Gallons of Equivalent Fuel:										1309.5	8.07	
Equivalent MPG of LDV Fleet in 2030:										162.27		

Table 9. HM Case and the EHM Case Which Supports 2005 Per-Capita Driving

Cases	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
HM	.00	.00	.00	.05	.10	.25	.40	.55	.70	.85	.95	.95	.95	.95	.95	.95
EHM	.00	.10	.30	.50	.70	.90	.95	.95	.95	.95	.95	.95	.95	.95	.95	.95

This system could be used to help reduce the ICE LDV miles driven in 2016 to 2022, as shown in the “f” column of Tables 7 and 8. This system could probably be implemented in less than 5 years.

Unbundling the Cost of Car Parking (7.5%)

Unbundling the cost of car parking^{R11} throughout California is conservatively estimated to decrease driving by 7.5%, based on Table 1 of Reference 11. That table shows driving reductions due to introducing a price, for 10 cases. Its average reduction in driving is 25% and its smallest reduction is 15%.

Good Bicycle Projects and Bicycle Traffic Skills Education (3%)

The best criterion for spending money for bicycle transportation is the estimated reduction in driving per the amount spent. The following strategies may come close to maximizing this parameter.

Projects to Improve Bicycle Access

All of the smart-growth neighborhoods, central business districts, and other high trip destinations or origins, both existing and planned, should be checked to see if bicycle access could be substantially improved with either a traffic calming project, a “complete streets” project, more shoulder width, or a project to overcome some natural or made-made obstacle.

League of American Bicyclist Certified Instruction of “Traffic Skills 101”

Most serious injuries to bike riders occur in accidents that do not involve a motor vehicle¹². Most car-bike accidents are caused by wrong-way riding and errors in intersections; the clear-cut-hit-from-behind accident is rare¹².

After attending *Traffic Skills 101*, students that pass a rigorous written test and demonstrate proficiency in riding in traffic and other challenging conditions could be paid for their time and effort.

As an example of what could be done in San Diego County, if the average class size was 3 riders per instructor and each rider passes both tests and earns \$100 and if the instructor, with overhead, costs \$500 dollars, for a total of \$800 for each 3 students, that would mean that \$160M could teach \$160M/\$800 = 200,000 classes of 3 students, for a total of 600,000 students. The population of San Diego County is around 3 million.

Eliminate or Greatly Increase the Maximum Height and Density Limits Close to Transit Stops that Meet Appropriate Service Standards (2%)

As sprawl is reduced, more compact, transit-oriented development (TOD) will need to be built. This strategy will incentivize a consideration of what level of transit service will be needed, how it can be achieved, and what levels of maximum height and density are appropriate. Having no limits at all is reasonable if models show that the development can function without harming the existing adjacent neighborhoods, given the level of transit service and other supporting transportation policies (such as car parking that unbundles the cost and supports the full sharing of parking¹²) that can be assumed.

Net Driving Reduction from All Identified Strategies

By 2030, the sum of these strategies should be realized. They total 23%, resulting in a 1% margin over the needed 22% (which is added to the existing 10% to get the needed 32%).

ADDITIONAL ELECTRICITY REQUIRED

The URL http://www.energy.ca.gov/2013_energypolicy/documents/2013-06-26_workshop/presentations/09_VMT-Bob_RAS_21Jun2013.pdf shows that Californians drove about 325 Billion miles per year, from 2002 to 2011. This value can be multiplied by the 0.8361 factor reduction of driving, computed right after the calculation shown in Equation 31, and the fraction of miles driven by ZEVs, shown at the bottom of Table 7, of 0.689 (from 68.9%), to give the 2030 miles driven by ZEVs = 325 Billion x 0.831 x 0.689 = 187 Billion miles per year.

Using the Tesla information here http://en.wikipedia.org/wiki/Tesla_Roadster, it is assumed that 21.7 kW-h is used per 100 miles, or 0.217 kW-h per mile. The total energy used per year is therefore 187 Billion miles x 0.217 kW-h = 40,648 GW-h.

<http://www.cpuc.ca.gov/cfaqs/howhighiscaliforniaselectricitydemandandwheredoesthepowercomefrom.htm>, shows that California is using about 265,000 GW-h per year. Therefore the electricity needed to power California's HM ZEV LDF fleet in 2030 is $100\% \times 40,648/265,000 = 15.34\%$ of the amount of electricity California is currently using.

CONCLUSION

A requirement set named "Heroic Measures" (HM) is quantified. Table 9 shows that the HM LDV efficiency requirements are much easier to achieve than those needed to allow per-capita driving to remain close to its 2005 level. Strategies to achieve the required HM driving reductions are also allocated and described. They are perhaps about as difficult as achieving the HM LDV fleet efficiency. It is computed that the 2030 fleet of LDV HM ZEVs would require an amount of electricity which is equal to about 15% of what California is using today.

ABBREVIATIONS AND ACRONYMS

AB 1493	California's Assembly Bill 1493	ICE	Internal Combustion Engine LDV
AB 32	California's Assembly Bill 32	kW-h	Kilo Watt-hour
APS	Alternative Planning Strategy	LCFS	Low Carbon Fuel Standard

CAFE	Corporate Average Fleet Efficiency	LDV	Light-Duty Vehicle
CARB	California Air Resources Board	MPO	Metropolitan Planning Organization
CBD	Center for Biological Diversity	Pavley	Senator Pavley's AB 1493
CEQA	California Environmental Quality Act	PPM	Parts per Million
CCAP	Center for Clean Air Policy	RPS	Renewable Portfolio Standard
CNFF	Cleveland National Forest Foundation	RTP	Regional Transportation Plan
SB 375	California's Senate Bill 375	S-3-05	Governor's Executive Order S-3-05
CO₂	Carbon Dioxide	SANDAG	San Diego Association of Governments
CO₂_e	Carbon Dioxide Equivalent GHG	SCS	Sustainable Community Strategy
EHM	"Extra Heroic Measures" LDV Case	TransNet	San Diego County sales tax
GEO	Governor's Executive Order	URL	Universal Resource Locator
GHG	Greenhouse gas	VMT	Vehicle Miles Travelled
GW-h	Giga Watt-Hours	ZEV	Zero Emission Vehicle LDV
HM	"Heroic Measures" LDV Case		

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KEYWORDS

Driving, climate, mandates, S-3-05, SB 375, RTP, CEQA, Unbundled, GHG, CAFÉ, ZEVs

Ideas and Proposals for San Diego CAP Improvement

Overview Road Map, based on the idea that breakthrough transportation strategies will lead to reductions even larger than what is predicted today. Also, that advocacy on the part of San Diego will result in the changes needed at the state and regional level.

- Commit money to seek grants to fund demonstration-projects that will reduce emissions, where such demonstration projects can be replicated, if successful.
- Establish a community-based Climate Action Plan stakeholder working group, including representatives from the Sierra Club, the Chamber of Commerce, the Environmental Health Coalition, the Cleveland National Forest Foundation, CirculateSD, faith-based organizations, the bicycle advocacy groups and/or others.
- Get an **Action Plan**, which could be divided into three categories
 - Capital Improvement and Expenditure Plan in sync with the CAP- for example, get bicycle/pedestrian projects, such as an aggressive program to offer “Traffic Skills 101” classes, taught by League-of-American-Bicyclist-Certified Instructors, on a fast track; also, projects to support bicycle short cuts and safety improvements into locations with a high number of trips.
 - A demonstration project to unbundle the cost of car parking
 - Advocacy actions, backed by Council resolutions, directed towards SANDAG and the State

Action Plan Ideas

1. Demonstration Project to Unbundle the Cost of Parking

San Diego would develop a Demonstration Project to Unbundle the Cost of Parking (“Demonstration Project”) at a city employee location (“Proposed Location”).

San Diego would (assuming the demonstration project was successful) unbundle the cost of the parking at all City buildings.

BACKGROUND: Currently, city employees do not have the ability to choose between earnings and driving – employees effectively pay for parking out of their salary, whether or not they use the parking. The Demonstration Project will provide the opportunity for employees to choose between earnings and driving.

PROJECT: Parking would be charged at a given rate (for example \$0.02/min – roughly \$9.60/day). Funds generated from these parking charges would be distributed as earnings to all employees working at the proposed location in proportion to each employee’s time spent at work, at the proposed location. Those who decide not to drive will not be charged for parking but will still make earnings based on time spent at work at the location. Implemented correctly, this free market approach will substantially reduce vehicle miles traveled (VMT) and greenhouse gas (GHG) emissions, by reducing the drive-alone mode.

For employees whose parking charges are greater than parking lot earnings, an “add-in” may be included so that no employee loses money, compared to “free parking”. With such “add-in” payments, there could be an “Opt in/Opt out” feature, meaning that those that “Opt out” will see no changes on their pay check, relative to “free parking” and will not get a monthly parking statement mailed to their home.

This project may be contingent on receiving a grant to pay the development and installation cost, as well as the “add in” payments, for some specified number of years. San Diego would need to apply for such a grant.

2. Community Choice Aggregation

The stakeholder group would help San Diego, as it moves forward, to fund a Community Choice Aggregation technical feasibility study. Community Choice Aggregation is a public power alternative that allows aggregation and purchase of electricity from an alternative to the incumbent utility.

3. Fuel-Efficient Vehicle Purchase Incentives

San Diego would agree to seek public/private partnerships between City, employees, and car manufacturers to incentivize fuel-efficient vehicle purchases.

4. Policy Adoption/Advocacy Ideas

- a. San Diego would agree to adopt a resolution directing its SANDAG delegate to take all reasonably available steps to get SANDAG to compute the driving-reduction trajectory required to support a science-based climate stabilization trajectory and to adopt a Regional Transportation Plan, with a Sustainable Communities Strategy (feasible strategies, as described in SB 375) and an Alternative Planning Strategy (infeasible strategies, as described in SB 375) that will achieve the needed driving-reduction trajectory.
- b. San Diego would agree to adopt a resolution directing its SANDAG delegate to take all reasonably available steps to get SANDAG to reprioritize transit projects over highway projects to the maximum extent legally feasible, including reallocation of TransNet funds as needed.
- c. San Diego would agree to adopt a resolution directing its SANDAG delegate to take all reasonably available steps to get the appropriate persons and entities to move toward full electrification and automation of local rail.
- d. San Diego would agree to adopt a resolution directing its SANDAG delegate to take all reasonably available steps to get SANDAG to adopt programs to unbundle the cost of parking and encourage local governments to do the same, including giving priority to projects in municipalities that include unbundled-cost parking, over those that do not.
- e. San Diego would agree to adopt a resolution requesting that statewide leaders work to develop a comprehensive road-use fee pricing and payout system.

Note that unbundling the cost of parking and a comprehensive road-use fee pricing and payout system have been discussed in the Sierra Club comment letters to San Diego.

5. Presentation.

If the San Diego City Council members and staff would agree to participate, we would offer a public workshop on the need for climate stabilization. This public workshop could include, at a minimum, a 45 minute presentation by Sierra Club or other representatives on this topic.

From: [Colin Parent - Circulate San Diego](#)
To: [DSD EAS](#)
Subject: REPORT: New Climate for Transportation
Date: Wednesday, September 23, 2015 11:39:44 AM



Friend:

[Circulate San Diego](#) and the [Climate Action Campaign](#) published a report "New Climate for Transportation," detailing the transportation outcomes compelled by the City of San Diego's Climate Action Plan.

[Read the report online here.](#)



The City of San Diego's proposed Climate Action Plan commits the City to change the way people get to work. Not only is transportation important for economic development, lifestyle, and social equity, it is a crucial component to reducing the risks from climate change.

Some of the mobility strategies outlined in the CAP must be implemented at the regional level by SANDAG—not by the City alone. However, San Diego Forward: The Regional Plan, SANDAG's long range transportation plan, projects transit, walking, and bicycling levels far smaller in the City of San Diego than what is called for by the CAP.

The City of San Diego's climate goals call for 50 percent of commuters living near transit to bicycle, walk, or take transit to work. However, according to SANDAG's own data, their plans will result in less than 15 percent for those same areas in the City of San Diego.

SANDAG's own projections show that it is mathematically impossible for the City of San Diego to achieve its transit and active transportation goals with the transportation network SANDAG is currently planning.

The City of San Diego must use the influence of its SANDAG Board members to ensure the region prioritizes sufficient funding to meet the transit and active transportation goals of the CAP.

[Read the report online here.](#)

Thank you,

Colin Parent - Circulate San Diego
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