



CHAPTER EIGHT conservation element

IN THIS CHAPTER

Goals

Climate Change
and Sustainability

Resource Management
and Preservation

The Barrio Logan Community Plan Conservation Element addresses the conservation goals and policies that can be effective in managing, preserving and thoughtfully using the natural resources of the community. Topic areas included in this element include Sustainability, as well as Resource Management and Preservation. This element additionally addresses Climate Change, which is seen as a major issue that could affect the health and longevity of the community and the ecological environment in Barrio Logan.

CE-1

GOALS

- An energy efficient transportation system.
- Public walkways that connect pedestrians with transit and community destinations.
- Enhancement of scenic resources and public access.
- An urban forest planting program.
- A tree canopy that reduces the urban heat island effect.
- Improved air quality.
- Water-efficient practices.
- Widespread use of drought-tolerant landscapes.
- Building energy efficiency and on-site production of renewable energy.
- A variety of recycling practices and opportunities.
- Cleaner storm water discharges into Las Chollas Creek and San Diego Bay.
- Restoration of Las Chollas and South Las Chollas Creeks.
- Use of sustainable storm water techniques.

8.1 CLIMATE CHANGE AND SUSTAINABILITY

The Conservation Element of the General Plan discusses climate change and provides a broad range of policies designed to promote sustainability and reduce greenhouse gas emissions (See General Plan policies CE-A-1 through CE-A-13). At the time of this Community Plan update, the City was also engaged in preparing a Climate Mitigation and Adaptation Plan (CMAP) that will address mitigation, as well as adaptation measures to proactively prepare for a range of anticipated climate change impacts. Although climate change is a global issue, individual communities can help reduce the emissions that contribute to climate change and devise local plans to adapt to anticipated changes.

A regional study looking at sea level rise impacts affecting the San Diego Bay was released in January 2012. The report titled *Sea Level Rise Adaptation Strategy for San Diego Bay*¹ evaluates where and when sea level rise impacts may occur, and recommends implementation of adaptation strategies to reduce those impacts. The report evaluated impacts based on a projected 20 inch (0.5 meter) increase in sea level in 2050 and a 59 inch (1.5 meter) increase in sea level in 2100. Rising sea levels are generally associated with impacts including flooding, inundation, erosion, salt water intrusion, and water table rise. A key finding of the report is that over the next few

decades there will be an increase in the frequency and severity of flooding due to waves, storm surge, El Nino events, and very high tides. Starting around mid-century, it was found that regularly occurring inundation may impact parts of the Bay.

There appear to be minimal impacts to the Barrio Logan Community Planning area in the 2050 scenario, but there is increased projected exposure to flooding and inundation in Barrio's Port Lands in the 2100 scenario. ¹ICLEI Local Governments for Sustainability, 1/2012.

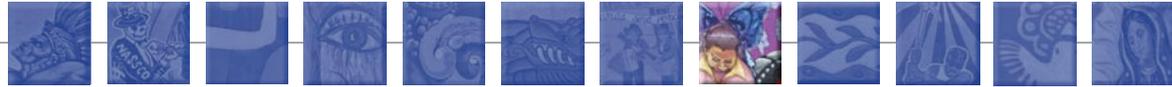
CLIMATE CHANGE AND SUSTAINABILITY POLICIES

Policy 8.1.1 Implement General Plan sustainability policies through innovative regulations and the project review process.

Policy 8.1.2 Monitor sea level rise studies and adaptation recommendations and develop an action plan over time.

Policy 8.1.3 Preserve and enhance Barrio Logan's attributes as a walkable community to provide residents with attractive alternatives to driving, thus reducing vehicle miles travelled and fostering a healthy community (see Mobility Element).

Policy 8.1.4 Reduce project level greenhouse gas emissions to acceptable levels through project design, application of site-specific mitigation measures, or adherence to standardized measures outlined in the City's adopted citywide climate action plan.



Encourage community gardens on vacant public land



Reduce project level greenhouse gas emissions to acceptable levels through design elements such as green roofs



Chollas Creek enhancements restore the creek's natural functions and appearance

8.2 RESOURCE MANAGEMENT AND PRESERVATION

OPEN SPACE AND LANDFORM PRESERVATION

Barrio Logan is an urbanized community with little remaining natural topography. The bay-front which is under the control of the San Diego Unified Port District and the U. S. Navy are primarily developed with maritime and industrial uses. Other than the San Diego Bay, the only natural open space is what remains of Las Chollas Creek and its immediate surroundings. It is important to note that the majority of the creek within Barrio Logan flows through the 32nd Street Naval Station. The General Plan has policies directly related to Open Space and Landform Preservation that can be found in policies CE-B.1 through CE-B.6.

Development/restoration of Las Chollas Creek is subject to the 2002 Chollas Creek Enhancement Program. The emphasis of the program is restoration of the creek's natural functions and the open space and passive recreational opportunities that come along with restoration. The Barrio Logan Bayside Phase IV Chollas Creek Enhancement Program is aimed at improving the branches of Las Chollas Creek and South Las Chollas Creek. Full scale improvements to the creek will involve coordination with the Regional Water Quality Control Board, San Diego Unified Port District, the Army Corps of Engineers, natural resource agencies, and the U.S. Navy.

OPEN SPACE AND LANDFORM PRESERVATION POLICIES

Policy 8.2.1 Initiate discussions with the U.S. Navy and other involved agencies regarding the restoration of Las Chollas Creek.

Policy 8.2.2 Maintain best management practices in all development to limit erosion and siltation.

Policy 8.2.3 Implement the recommendations contained in the Chollas Creek Enhancement Program such as removing concrete channels in Las Chollas Creek, where feasible, to create a more natural function and appearance, and establishing trails and other passive recreation amenities.

Policy 8.2.4 Remove invasive species from Las Chollas Creek and restore habitat.

Policy 8.2.5 Preserve and protect Open Space by preventing incompatible uses, such as off-road activities, frisbee golf, community gardens, off leash dog areas and equestrian use.

WATER RESOURCE MANAGEMENT

The San Diego region is a semi-arid coastal climate with limited local water resources and storage capacities, requiring the City to rely heavily on importing water from the Colorado River and Northern California. Since the City has no direct control over the amount of water it can import, it is important that the water which is available be used as efficiently as is possible. The General Plan addresses Water Resource Management in policies CE-D.1 through CE-D.5.

WATER RESOURCE MANAGEMENT POLICIES

Policy 8.2.6 Require all landscape design to use water conserving plant material and techniques to comply with the landscape water budget of the Municipal Code.

Policy 8.2.7 Encourage development to incorporate recycled and/or gray water irrigation systems early in the development process.

Policy 8.2.8 Provide ongoing education on water resource conservation opportunities available through the City of San Diego’s Department of Public Works and the San Diego County Water Authority.

URBAN RUNOFF MANAGEMENT

Urban runoff occurs when water from rainfall or manmade operations flows over impervious surfaces and then makes its way into the storm



Encourage landscapes that use water conserving plant material

conveyance system from where it can eventually reach the San Diego Bay or enter into waterways such as Las Chollas Creek. Urban runoff carries pollutants that are picked up by the water as it flows over urban surfaces. These pollutants include but are not limited to oils, grease, trash, pesticides, organic waste, and metals. If not constrained, these pollutants make their way into Las Chollas Creek and the San Diego Bay. The General Plan addresses urban runoff management in policies CE-E.1 through CE-E.7.

URBAN RUNOFF MANAGEMENT POLICIES

Policy 8.2.9 Encourage development to use Low-Impact Development (LID) practices such as bioretention, porous paving, and green roofs, that slow runoff and absorb pollutants from roofs, parking areas and other urban surfaces.

Policy 8.2.10 Incorporate bioswales or other LID design practices where there is sufficient public rights-of-way throughout the community, and focus specific efforts to capture storm water along Harbor Drive before it reaches San Diego Bay. Where appropriate, these features should be implemented. They may be infeasible due to soil conditions and impacts to utilities.

Policy 8.2.11 Encourage private property owners to design or retrofit landscaped or impervious areas to better capture storm water runoff.

Policy 8.2.12 Repair and maintain drainage outfalls and brow ditches that discharge directly to or are within open space lands.

Policy 8.2.13 Encourage, through redevelopment and retrofitting, phasing out of commercial and industrial building materials such as galvanized roofs that leach metals into storm water runoff.

Policy 8.2.14 Reduce, through redevelopment and retrofitting, the amount of uncovered industrial and commercial areas where the work activity may contribute pollutants.

Policy 8.2.15 Encourage neighborhood practices for preventing and removing buildup of trash and pet waste on land surfaces.

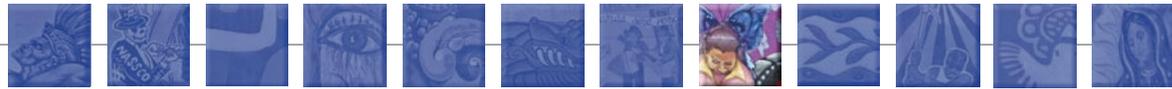
AIR QUALITY

Health problems associated with poor air quality are especially significant for children, the elderly, and persons with respiratory problems. In the San Diego region, 80 percent of air pollution is caused by fossil fuel burning vehicles. The most harmful



The most harmful emissions come from diesel fuel emissions which contain toxic particulate matter

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emissions come from diesel fuel emissions which contain toxic particulate matter. Within Barrio Logan, the majority of diesel fuel emissions come from transporting goods on trucks throughout the community. The General Plan addresses air quality in policies CE-F.1 through CE-F.9.

AIR QUALITY POLICIES

Policy 8.2.16 Designate and enforce appropriate trucking routes in order to limit impacts of trucks within the Barrio Logan Community.

Policy 8.2.17 Educate businesses and residents on the benefits of alternative modes of transportation including public transit, walking, bicycling, car and van pooling, and telecommuting.

Policy 8.2.18 Create incentives to encourage relocation of incompatible uses that contribute to poor air quality.

Policy 8.2.19 Encourage street tree and private tree planting programs throughout the community to increase absorption of carbon dioxide and pollutants.

SUSTAINABLE ENERGY

Creation of clean, renewable, and sustainable local energy resources provides environmental benefits and increases economic certainty and stability for residents and business alike. The General Plan addresses sustainable energy in policies CE-I.1 through CE-I.13.

SUSTAINABLE ENERGY POLICIES

Policy 8.2.20 Promote development that qualifies for the City's Sustainable Buildings Expedite Program.

Policy 8.2.21 Educate residents and businesses on efficient appliances and techniques for reducing energy consumption.

Policy 8.2.22 Provide and/or retrofit lighting in the public right-of-way that is energy efficient.

Policy 8.2.23 Provide information on programs and incentives for achieving more energy efficient buildings and renewable energy production.

URBAN FORESTRY

Street tree and private tree planting programs are low cost, low-technology methods for improving the visual landscape and air quality in Barrio Logan. As the number and size of trees in the Barrio Logan urban forest increases so will the benefits. These benefits include lower energy consumption resulting from reduction in the size

of the urban heat island; reduced storm water runoff through absorption of water by the trees; improved air quality achieved as the trees convert carbon dioxide into oxygen, and an improved pedestrian environment created by providing pedestrians protection from the heat and glare of the sun. Refer to the Urban Design Element Urban Forest/Street Trees section, as well as Appendix A, for further direction on street trees. All proposed development within Barrio Logan will be required to plant and maintain street trees as identified on the plan. The General Plan addresses urban forestry in policies CE-J.1 through CE-J.5.

URBAN FORESTRY POLICIES

Policy 8.2.24 Increase the overall tree canopy cover throughout Barrio Logan by 20% in urban residential areas and 10% in the business areas so that the natural landscape is sufficient in mass to provide significant benefits to the city in terms of air and water management.



Use small canopy trees to frame public views



Street trees enhance the pedestrian environment

Policy 8.2.25 Work with the City’s Urban Forestry Division to coordinate the appropriate selection and location of shade-producing trees.

Policy 8.2.26 Require that new development retain significant and mature trees.

Policy 8.2.27 Support public outreach efforts to educate business owners, residents, and school children on the care of and environmental benefits of shade-producing street trees.

SOLID WASTE MANAGEMENT

An effective integrated waste management strategy conserves raw materials and energy, ensures that waste materials do not become a health threat, and reduces the need for new disposal facilities. The General Plan addresses waste management in policies PF-I.1 through PF-I.5.

Barrio Logan is home to several large recycling facilities that are an important part of the local recycling infrastructure. Businesses and residents within and adjacent to Barrio Logan utilize these facilities to recycle materials.

SOLID WASTE MANAGEMENT POLICIES

Policy 8.2.28 Encourage multi-story developments to include solid waste and recycling management measures, such as dual trash/recycling chutes, in development plans to facilitate compliance with recycling regulations.

Policy 8.2.29 Promote recycling facilities that are well maintained, attractive in appearance, and help promote waste reduction in the community.

SCENIC RESOURCES AND PUBLIC ACCESS

The visual quality of Barrio Logan is marked by a number of visual barriers and a lack of major vista points. Because the natural landform is a low-lying coastal plain of less than 60 feet in elevation, the community’s views are easily dominated by any large structure. The community boundaries are clearly demarcated by I-5 on the east. The elevated portions of the freeways provide continuous views of the community. San Diego Bay is the dominating feature but its presence is generally obscured at ground level due to the industrial development in the tidelands area under the jurisdiction of the Port District. Disruptive visual barriers occur continuously along the entire length of Harbor Drive through the community.

These barriers, generally prevent visual access to the bay as well as into the community. In contrast to these barriers the San Diego-Coronado Bridge offers a location from which to obtain continuous views of the community. These views are not available to pedestrians since the bridge is restricted to auto traffic. The bridge itself is also a major landmark but the bridge’s support columns are structural interruptions in the visual continuity of the community experienced at ground level.

Because of its geographical location and topography (Figure 8-1), there are tremendous opportunities to maximize views which in the past have not been conscientiously developed. Views into San Diego Bay are a major visual element of the Barrio Logan Community. Barrio Logan’s location adjacent to San Diego Bay and downtown provides opportunities to preserve and enhance existing scenic views from within the community. Critical view corridors to downtown San Diego are shown on Figure 8-1.

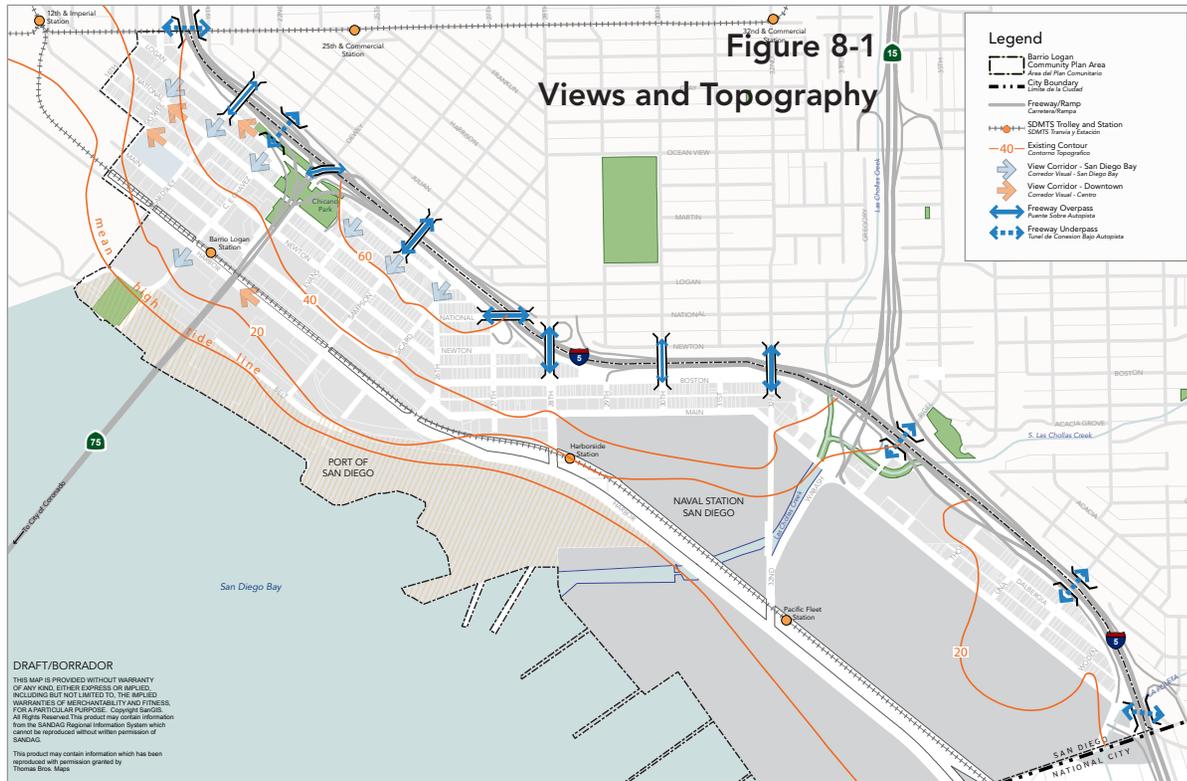
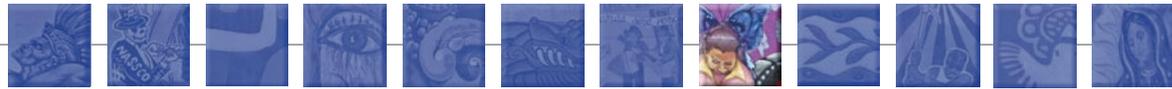
CE-6



Cesar Chavez park looking into the Bay



Harbor view corridor



public access to community destinations such as community centers, schools, shopping, transit, and the San Diego Bay front. These streets and walkways are designed to provide pedestrian amenities. An example of this is the design of the Cesar E. Chavez Parkway which serves to connect the community to Cesar Chavez Park and the San Diego Bay front as a ceremonial street. Specifics about access and streetscape are located in the Mobility and Urban Design Elements of this Plan.

SCENIC RESOURCES AND PUBLIC ACCESS POLICIES

Policy 8.2.30 Coordinate with the Port District to establish building setbacks within their jurisdiction that will preserve public views to San Diego Bay.

Policy 8.2.31 Require 15-foot wide minimum sidewalks along Cesar E. Chavez Parkway and Sampson Street to maintain and frame views to San Diego Bay.

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Critical view corridors to San Diego Bay are: Sigsbee Street, Cesar E. Chavez Parkway, Sampson, 26th, 28th and 32nd Streets. Enhancing the view corridor to San Diego Bay from Cesar E. Chavez Parkway is a primary recommendation of this plan since Cesar E. Chavez Parkway is designated as Barrio Logan’s ceremonial street. Hand-in-hand with preservation and enhancement of scenic views is preservation and enhancement of streets and walkways that provide



Newton Avenue view corridor



Promote development of urban agriculture in Barrio Logan



Locate community gardens on publicly-owned properties whenever possible

Policy 8.2.32 Use tall, large canopy street trees along Cesar E. Chavez Parkway and Sampson Street to frame public views to San Diego Bay.

Policy 8.2.33 Require 10-foot wide minimum sidewalks along Main Street, Newton Avenue and National Avenue north of the bridge in order to maintain and frame views to downtown skyline.

Policy 8.2.34 Use narrow small canopy street trees along Beardsley Street and Sigsbee Street to frame public views to San Diego Bay.

Policy 8.2.35 Maintain and enhance public access to the San Diego bayfront along Cesar E. Chavez Parkway through the development of a ceremonial street from I-5 to the San Diego Bay that includes a minimum of 15-foot wide sidewalks with landscaped parkways and medians as space permits.

COMMUNITY GARDENS AND URBAN AGRICULTURE

Barrio Logan has the potential to provide multiple sites for community gardens that contain individual and shared-plot spaces. For instance, land owned by San Diego Gas and Electric at Sampson Street and Newton Avenue, BNSF railroad along Harbor Drive, the Metropolitan Transit System, Caltrans, the City of San Diego as well as the San Diego Unified School District may have remnant parcels that could be used as community gardens.

All future community gardens should become attractive focal points that bring the neighborhood together as a way to interact, recreate and create a sustainable food system within the community.

COMMUNITY GARDENS AND URBAN AGRICULTURE POLICIES

Policy 8.2.36 Promote the inclusion and development of urban agriculture in Barrio Logan.

Policy 8.2.37 Locate community gardens in Barrio Logan where there is sufficient demand, appropriate land, and where they will not generate adverse impacts on adjacent uses.

Policy 8.2.38 Develop and maintain partnerships with organizations that provide services, programs, and activities that would complement a Community Garden program in Barrio Logan.

Policy 8.2.39 Locate community gardens on publicly-owned properties whenever possible, such as SDG&E parcel at Sampson Street and Newton Avenue or along the Caltrans-owned parcels along Boston Avenue between 29th and 32nd Streets.