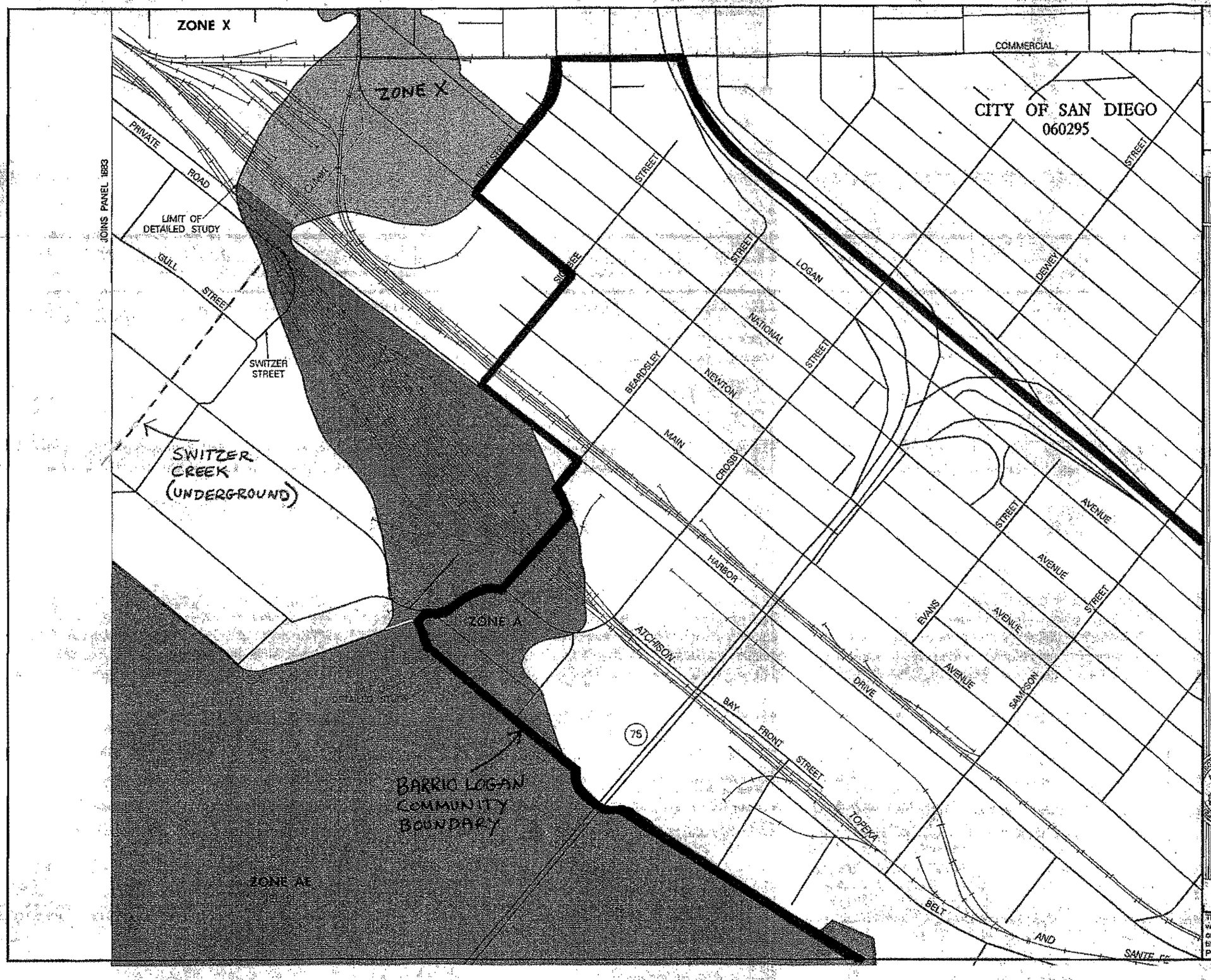
ATTACHMENT B

Annotated FIRMettes



APPROXIMATE SCALE IN FEET

500 0 500

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

SAN DIEGO COUNTY, CALIFORNIA AND INCORPORATED AREAS

PANEL 1884 OF 2375

(SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS: COMMUNITY	NUMBER	PANEL	SUFFIX
CORONADO, CITY OF	060287	1884	F
SAN DIEGO, CITY OF	060295	1884	F
SAN DIEGO COUNTY, UNINCORPORATED AREAS	060284	1884	F

MAP NUMBER
06073C1884 F

EFFECTIVE DATE:
JUNE 19, 1997

Federal Emergency Management Agency

APPROXIMATE SCALE IN FEET
600 0 500

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

SAN DIEGO COUNTY, CALIFORNIA AND INCORPORATED AREAS

PANEL 1903 OF 2375
(SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS: COMMUNITY	NUMBER	PANEL	SUFFIX
NATIONAL CITY, CITY OF	060293	1903	F
SAN DIEGO COUNTY, UNINCORPORATED AREAS	060284	1903	F
SAN DIEGO, CITY OF	060295	1903	F

MAP NUMBER
06073C1903 F

EFFECTIVE DATE:
JUNE 19, 1997

Federal Emergency Management Agency

JOINS PANEL 1911

32°40'15"
117°07'30"

BARRIO LOGAN COMMUNITY BOUNDARY

117°07'30"
5"

APPROXIMATE SCALE IN FEET
500 0 500

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

SAN DIEGO COUNTY, CALIFORNIA AND INCORPORATED AREAS

PANEL 1911 OF 2375
(SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
NATIONAL CITY, CITY OF	060293	1911	F
SAN DIEGO, CITY OF	060295	1911	F
SAN DIEGO COUNTY, UNINCORPORATED AREAS	060284	1911	F

MAP NUMBER
06073C1911 F

EFFECTIVE DATE:
JUNE 19, 1997

Federal Emergency Management Agency

SAN DIEGO NAVAL RESERVATION
ZONE D
ZONE X
ZONE D
CITY OF SAN DIEGO 060295
SAN DIEGO NAVAL RESERVATION
ZONE AE
ZONE X
ZONE AO (DEPTH 1)
ZONE X
ZONE AO (DEPTH 1)
ZONE X
CITY OF SAN DIEGO 060295
CITY OF NATIONAL CITY
ZONE D
JOINS PANEL 1903
LIMIT OF DETAILED STUDY
Las Puleta Creek
Culvert
RM27
Street Channel
NORMAN SCOTT ROAD
MC CANDLESS
HARBOR ROAD
CUMMINGS ROAD
BAINBRIDGE STREET
WARD ROAD
KALBFUS STREET
VESTA STREET
FRIGHT STREET
BRINSER STREET
CHURCH STREET
MORRIS STREET
32ND STREET
SOUTH
UNA STREET
DALBERGIA STREET
ALLEY
BIRCH STREET
OSBORN STREET
WODEN STREET
CRAVEN STREET
DOYLE STREET
PAUNACK STREET
RAVENSCROFT AVENUE
HOOVER AVENUE
MCCANDLESS ROAD
4TH STREET
7TH
PRIVATE ROAD
YAMA STREET
DIVISION STREET
WEST
EAST
MARINE VIEW
ELM AVENUE
ALBERTA COURT
BALSAM DRIVE
CANNA DRIVE
DAHLIA DRIVE
NATIONAL CITY BOULEVARD
A AVENUE
23RD STREET
30TH STREET
ETA

ATTACHMENT C

Excerpts from 2006 Clean Water Act Section 303(d) List of Water Quality Limited Segments (303(d) List)

2006 CWA SECTION 303(d) LIST OF WATER QUALITY LIMITED SEGMENTS REQUIRING TMDLS

SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD

USEPA APPROVAL DATE: JUNE 28, 2007

REGION	TYPE	NAME	CALWATER WATERSHED	POLLUTANT/STRESSOR	POTENTIAL SOURCES	ESTIMATED SIZE AFFECTED	PROPOSED TMDL COMPLETION
				Nutrients		202 Acres	2019
				Estimated size of impairment is 150 acres located in upper portion of lagoon.			
					Nonpoint/Point Source		
				Sedimentation/Siltation		202 Acres	2019
					Nonpoint/Point Source		
9	R	Chollas Creek	90822000				
				Copper		3.5 Miles	2004
					Nonpoint/Point Source		
				Indicator bacteria		3.5 Miles	2005
					Nonpoint/Point Source		
				Lead		3.5 Miles	2004
					Nonpoint/Point Source		
				Zinc		3.5 Miles	2004
					Nonpoint/Point Source		
9	R	Cloverdale Creek	90532000				
				Phosphorus		1.2 Miles	2019
					Urban Runoff/Storm Sewers		
					Unknown Nonpoint Source		
					Unknown point source		
				Total Dissolved Solids		1.2 Miles	2019
					Urban Runoff/Storm Sewers		
					Unknown Nonpoint Source		
					Unknown point source		
9	R	Cottonwood Creek (San Marcos Creek watershed)	90451000				
				DDT		1.9 Miles	2019
					Source Unknown		

2006 CWA SECTION 303(d) LIST OF WATER QUALITY LIMITED SEGMENTS REQUIRING TMDLS

SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD

USEPA APPROVAL DATE: JUNE 28, 2007

REGION	TYPE	NAME	CALWATER WATERSHED	POLLUTANT/STRESSOR	POTENTIAL SOURCES	ESTIMATED SIZE AFFECTED		PROPOSED TMDL COMPLETION
				Sulfates		5	Miles	2019
					Source Unknown			
				Total Dissolved Solids		5	Miles	2019
					Source Unknown			
9	R	Reidy Canyon Creek	90462000					
				Phosphorus		3.9	Miles	2019
					Source Unknown			
9	B	San Diego Bay	91010000					
				PCBs (Polychlorinated biphenyls)		10783	Acres	2019
					Source Unknown			
9	B	San Diego Bay Shoreline, 32nd St San Diego Naval Station	90822000					
				Benthic Community Effects		103	Acres	2019
					Nonpoint/Point Source			
				Sediment Toxicity		103	Acres	2019
					Nonpoint/Point Source			
9	B	San Diego Bay Shoreline, at Americas Cup Harbor	90810000					
				Copper		88	Acres	2019
					Source Unknown			
9	B	San Diego Bay Shoreline, at Bayside Park (J Street)	90911000					
				Indicator bacteria		50	Acres	2019
				This listing was made by USEPA for 2006.				
					Source Unknown			
9	B	San Diego Bay Shoreline, at Coronado Cays	91010000					
				Copper		47	Acres	2019
					Source Unknown			

2006 CWA SECTION 303(d) LIST OF WATER QUALITY LIMITED SEGMENTS REQUIRING TMDLS

SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD

USEPA APPROVAL DATE: JUNE 28, 2007

REGION	TYPE	NAME	CALWATER WATERSHED	POLLUTANT/STRESSOR	POTENTIAL SOURCES	ESTIMATED SIZE AFFECTED	PROPOSED TMDL COMPLETION
9	B	San Diego Bay Shoreline, at Glorietta Bay	91010000				
				Copper		52 Acres	2019
					Source Unknown		
9	B	San Diego Bay Shoreline, at Harbor Island (East Basin)	90821000				
				Copper		73 Acres	2019
					Source Unknown		
9	B	San Diego Bay Shoreline, at Harbor Island (West Basin)	90810000				
				Copper		132 Acres	2019
					Source Unknown		
9	B	San Diego Bay Shoreline, at Marriott Marina	90821000				
				Copper		24 Acres	2019
					Source Unknown		
9	B	San Diego Bay Shoreline, between Sampson and 28th Streets	90822000				
				Copper		53 Acres	2005
					Nonpoint/Point Source		
				Mercury		53 Acres	2006
					Nonpoint/Point Source		
				PAHs (Polycyclic Aromatic Hydrocarbons)		53 Acres	2006
					Nonpoint/Point Source		
				PCBs (Polychlorinated biphenyls)		53 Acres	2019
					Nonpoint/Point Source		
				Zinc		53 Acres	2019
					Nonpoint/Point Source		

2006 CWA SECTION 303(d) LIST OF WATER QUALITY LIMITED SEGMENTS REQUIRING TMDLS

SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD

USEPA APPROVAL DATE: JUNE 28, 2007

REGION	TYPE	NAME	CALWATER WATERSHED	POLLUTANT/STRESSOR	POTENTIAL SOURCES	ESTIMATED SIZE AFFECTED	PROPOSED TMDL COMPLETION
9	C	San Diego Bay Shoreline, Chula Vista Marina	90912000				
				Copper		0.41 Miles	2019
					Source Unknown		
9	B	San Diego Bay Shoreline, Downtown Anchorage	90821000				
				Benthic Community Effects		7.4 Acres	2019
					Nonpoint/Point Source		
				Sediment Toxicity		7.4 Acres	2019
					Nonpoint/Point Source		
9	C	San Diego Bay Shoreline, G Street Pier	90821000				
				Indicator bacteria		0.42 Miles	2006
					Urban Runoff/Storm Sewers		
					Unknown Nonpoint Source		
					Unknown point source		
9	B	San Diego Bay Shoreline, near Chollas Creek	90822000				
				Benthic Community Effects		15 Acres	2006
					Nonpoint/Point Source		
				Sediment Toxicity		15 Acres	2006
					Nonpoint/Point Source		
9	B	San Diego Bay Shoreline, near Coronado Bridge	90822000				
				Benthic Community Effects		37 Acres	2019
					Nonpoint/Point Source		
				Sediment Toxicity		37 Acres	2019
				Includes Crosby Street/Cesar Chavez Park area, that will receive additional monitoring.			
					Nonpoint/Point Source		
9	B	San Diego Bay Shoreline, near sub base	90810000				
				Benthic Community Effects		16 Acres	2019
					Nonpoint/Point Source		
				Sediment Toxicity		16 Acres	2019
					Nonpoint/Point Source		

2006 CWA SECTION 303(d) LIST OF WATER QUALITY LIMITED SEGMENTS REQUIRING TMDLS

SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD

USEPA APPROVAL DATE: JUNE 28, 2007

REGION	TYPE	NAME	CALWATER WATERSHED	POLLUTANT/STRESSOR	POTENTIAL SOURCES	ESTIMATED SIZE AFFECTED	PROPOSED TMDL COMPLETION
9	B	San Diego Bay Shoreline, near Switzer Creek	90821000				
				Chlordane		5.5 Acres	2019
					Urban Runoff/Storm Sewers		
					Other		
					Boatyards		
					Nonpoint/Point Source		
				Lindane/Hexachlorocyclohexane (HCH)		5.5 Acres	2019
					Urban Runoff/Storm Sewers		
					Other		
					Boatyards		
					Nonpoint/Point Source		
				PAHs (Polycyclic Aromatic Hydrocarbons)		5.5 Acres	2019
					Urban Runoff/Storm Sewers		
					Other		
					Boatyards		
					Nonpoint/Point Source		
9	B	San Diego Bay Shoreline, North of 24th Street Marine Terminal	90832000				
				Benthic Community Effects		9.5 Acres	2019
					Nonpoint/Point Source		
				Sediment Toxicity		9.5 Acres	2019
					Nonpoint/Point Source		
9	B	San Diego Bay Shoreline, Seventh Street Channel	90831000				
				Benthic Community Effects		9 Acres	2008
					Nonpoint/Point Source		
				Sediment Toxicity		9 Acres	2008
					Nonpoint/Point Source		
9	C	San Diego Bay Shoreline, Shelter Island Shoreline Park	90810000				
				Indicator bacteria		0.42 Miles	2006
					Unknown Nonpoint Source		
					Unknown point source		

Outlet of Paleta Creek or Las Puleta Creek

ATTACHMENT D

City of San Diego Council Policy 600-14 and Excerpts from Land Development Code (Sections 143.0145 and 143.0146)

CITY OF SAN DIEGO, CALIFORNIA

COUNCIL POLICY

CURRENT

SUBJECT: DEVELOPMENT WITHIN AREAS OF SPECIAL FLOOD HAZARD
POLICY NO.: 600-14
EFFECTIVE DATE: December 12, 2000

BACKGROUND:

Development within areas of special flood hazard is unwise from a health, safety and general welfare standpoint. If property in a floodplain is elevated to avoid inundation the resulting effect is an increase in the water surface elevation in other areas of the floodplain. In the absence of FEMA regulations, the accumulated effect of development can increase the potential damage to other existing or proposed developments.

The National Flood Insurance Act of 1968 established the Federal Flood Insurance Program which provides subsidized flood insurance for all property owners providing that the local government institutes adequate land use and development control measures for preventing and reducing property damage from flooding. The City of San Diego, by Council Resolution, indicated its desire to qualify for the Federal Flood Insurance Program and, in 1973, adopted appropriate floodplain regulatory zoning consisting of the Floodway (FW) and Floodplain Fringe (FPF) zones.

PURPOSE & INTENT:

To promote the public health, safety and general welfare, and to minimize public and private losses due to flooding and flood conditions in specific areas by provisions designed to:

a. Protect human life and health;
b. Provide Environmental Protection consistent with related City requirements;
c. Minimize expenditure of public funds for flood control projects;
d. Minimize the need for rescue and relief efforts associated with flooding;
e. Minimize prolonged business interruptions;
f. Minimize damage to public facilities and utilities located in areas of special flood hazard.

POLICY:

It is the Council's policy to regulate development within Special Flood Hazard Areas in accordance with the requirements of the Land Development Code. It is also the Council's policy to consider all applicable criteria as stated herein, in addition to the requirements of the Land Development Code, when approving deviations from the floodplain regulations. This policy shall apply to all areas of special flood hazard within the City of San Diego.

DEVIATION CRITERIA:

Where a deviation from the Environmentally Sensitive Lands Regulations of the Land Development Code (Sections 143.0145 and 143.0146) is requested, the decision maker shall consider all relevant factors, all technical evaluations, and all standards provided by the City Engineer in addition to the following conditions:

a. A deviation shall not be approved within any designated floodway if any increase in flood levels during the base flood discharge would result. (See Diagram 1, Floodplain Schematic in Appendix A of Council Policy 600-14).

b. A deviation may be approved only upon:

1. a showing of good and sufficient cause;

2. a determination that the proposed deviation is the minimum necessary to afford relief from special circumstances or condition of land, not of the applicant's making;

3. a determination that failure to grant the deviation would result in exceptional hardship to the applicant; and

4. a determination that the granting of a deviation will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

c. A deviation may be issued for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.

d. Any applicant to whom a deviation is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the regulatory flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

e. In approving a deviation request the decision maker shall also consider the following factors:

1. the danger that materials may be swept onto other lands to the injury of others;

2. the danger of life and property due to flooding or erosion damage;

3. the susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;

4. the importance of the services provided by the proposed facility to the community;

5. the necessity to the facility of a waterfront location, where applicable;

6. the availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;

7. the compatibility of the proposed use with existing and anticipated development;

8. the relationship of the proposed use to the comprehensive plan and floodplain management program for the area;

9. the safety of access to the property in time of flood for ordinary and emergency vehicles;

10. the expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters expected at the site; and,

11. the costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.

HISTORY:

Adopted by Resolution R-203632 09/02/1971
Amended by Resolution R-212811 03/13/1975
Reaffirmed by Council
Resolution R-214421 10/08/1975
Amended by Resolution R-272880 02/14/1989
Amended by Resolution R-289515 12/02/1997
Amended by Resolution R-294394 12/12/2000

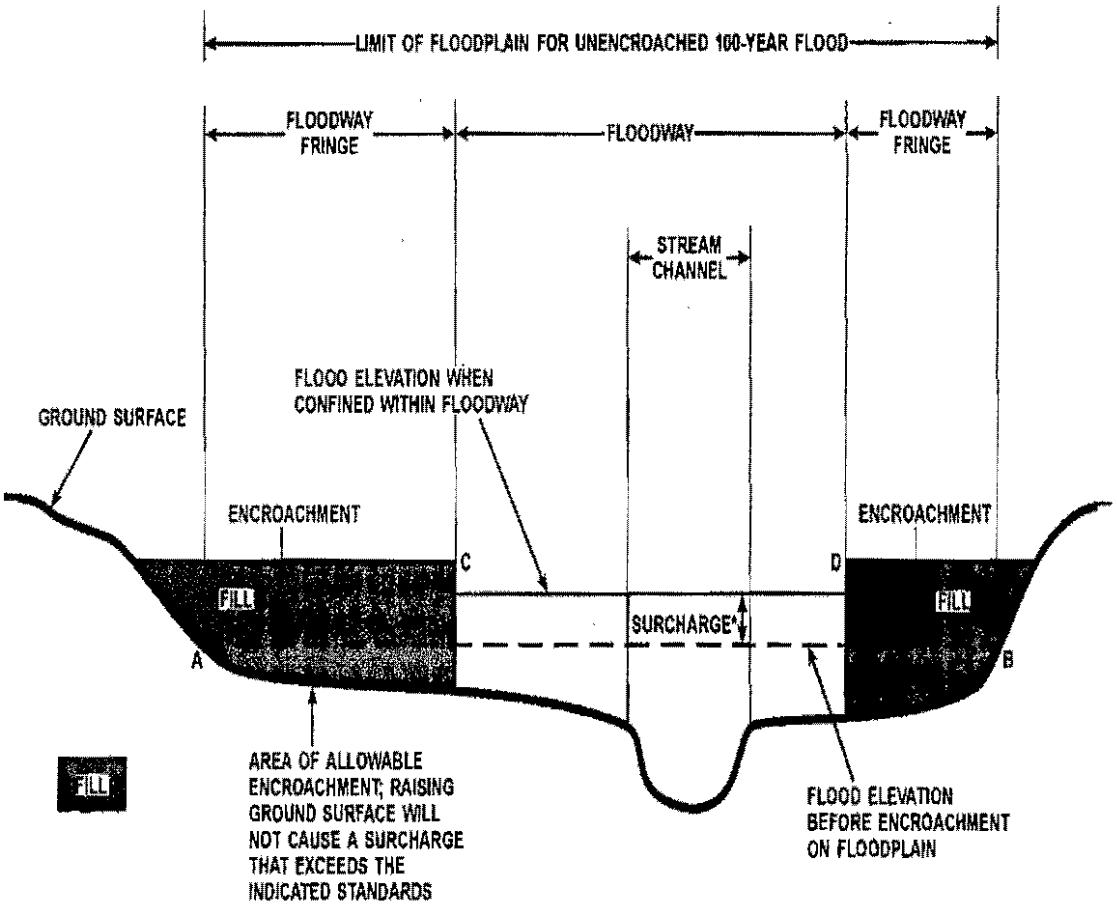
CITY OF SAN DIEGO, CALIFORNIA

COUNCIL POLICY

CURRENT

COUNCIL POLICY 600-14
APPENDIX A

Diagram 1
Floodplain Schematic



LINE A - B IS THE FLOOD ELEVATION BEFORE ENCROACHMENT
LINE C - D IS THE FLOOD ELEVATION AFTER ENCROACHMENT

*SURCHARGE NOT TO EXCEED 1.0 FOOT (FEDERAL EMERGENCY MANAGEMENT AGENCY REQUIREMENT) OR LESSER HEIGHT IF SPECIFIED BY STATE

Note:

Reproduced from the Federal Emergency Management Agency (FEMA), Sample Text of a Flood Insurance Study, issued August 19, 1998.

§143.0145 Development Regulations for Special Flood Hazard Areas

(a) *Special Flood Hazard Areas* within the City of San Diego are established in accordance with the report entitled "*Flood Insurance Study*, San Diego County, California," dated June 16, 1999 and the accompanying *Flood Insurance Rate Maps (FIRM),* published by the Federal Emergency Management Agency (FEMA), on file in the office of the City Clerk as Document Nos. 18910-1 and 18910-2, including any supplements, amendments, and revisions which are properly promulgated by FEMA or the Federal Insurance Administrator.

(b) For the purpose of Sections 143.0145 and 143.0146, the City Engineer is the designated Floodplain Administrator and shall administer, implement, and enforce these regulations.

(c) The degree of *flood* protection required by this section is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger *floods* can and will occur on rare occasions. It is possible that increased *flood* heights may result from man-made or natural causes. This section does not imply that land outside a *Special Flood Hazard Area* or uses permitted within such areas will be free from *flooding* or *flood* damages. This section shall not create liability on the part of the City, any officer or employee thereof, or the FEMA, for any *flood* damages that result from reliance on this chapter or any administrative decision lawfully made there under.

(d) The following development regulations and all other applicable requirements and regulations of FEMA apply to all *development* proposing to encroach into a *Special Flood Hazard Area*, including both the *floodway* and *flood fringe* areas or that does not qualify for an exemption pursuant to Section 143.0110(c):

(e) *Floodways*

(1) Within the *floodway* portion of a *premises*, development regulations are as set forth for the OF zone, pursuant to Section 131.0231.

(2) *Structures* associated with any allowed use shall comply with the following requirements:

(A) *Structures* shall not be attached to a foundation, in order to readily move them in case of *flood*; and

(B) *Structures* shall be removed upon imminence of *flooding*, as predicted by the National Weather Service or local public weather broadcast. If a *structure* is not removed and *flooding* occurs, the retrieval or salvage of the *structure* and repair of any damage caused by the *structure* shall be the responsibility of the owner.

(3) *Channelization* or other substantial alteration of rivers or streams shall be limited to that necessary for the following:

(A) Essential public service projects, where no other feasible construction method or alternative project location exists; and

(B) *Flood* control projects, where no other feasible method for protecting existing public or private *development* exists and where such protection is necessary for public safety.

(C) Projects where the primary function is the improvement of fish and wildlife habitat.

(4) *Development* in *floodways* shall be offset by improvements or modifications to enable the passage of a *base flood*, in accordance with the FEMA standards and regulations provided in Section 143.0146.

(5) *Development* that involves *channelization* or other substantial alteration of rivers or streams is subject to the following requirements.

(A) All requirements and relevant recommendations of hydrological studies for the watershed of the affected stream, as approved by the City Engineer, shall be incorporated into the project design and mitigation measures. These requirements include erosional characteristics, flow velocities, volume, sediment transport, and maintenance of hydrology.

(B) The channel shall be designed to ensure that the following occur:

(i) Stream scour is minimized;

(ii) Erosion protection is provided;

(iii) Water flow velocities are maintained as specified by the City Engineer;

(iv) There are neither significant increases nor contributions to downstream bank erosion and sedimentation of *sensitive biological resources*; acceptable techniques to control stream sediment include planting riparian vegetation in and near the stream and detention or retention basins;

(v) Wildlife habitat and corridors are maintained;

(vi) Resource management criteria are implemented consistent with applicable *land use plans*; and

(vii) Groundwater recharge capability is maintained or improved.

(C) Channels that accommodate a *base flood* shall do so without increasing the water surface elevation more than one foot at any point from the level of a nonconfined *base flood* in the natural undeveloped floodplain. Channels may accommodate less than a *base flood* (low-flow channels), but shall be designed and constructed in accordance with FEMA regulations.

(D) All artificial channels shall consist of natural bottoms and sides and shall be designed and sized to accommodate existing and proposed riparian vegetation and other natural or proposed constraints. Where maintenance is proposed or required to keep vegetation at existing levels compatible with the design capacity of the channel, a responsible party shall be identified and a maintenance and monitoring process shall be established to the satisfaction of the City Engineer.

(6) *Development* shall not significantly adversely affect existing *sensitive biological resources* on-site or off-site.

(7) Within the Coastal Overlay Zone, no *structure* or portion thereof shall be erected, constructed, converted, established, altered or enlarged, or no landform alteration *grading*, placement or removal of vegetation, except that related to a historic and ongoing agricultural operation, or land division shall be permitted, provided:

(A) Parking lots, new roadways and roadway expansions shall be allowed only where indicated on an adopted *Local Coastal Program land use plan.*

(B) *Floodway* encroachments for utility and transportation crossings shall be offset by improvements or modifications to enable the passage of the *base flood*, in accordance with the FEMA standards and regulations provided in Section 143.0146.

(f) *Flood Fringe*. The applicable development regulations are those in the underlying zone, subject to the following supplemental regulations:

(1) Within the *flood fringe* of a *Special Flood Hazard Area*, permanent *structures* and *fill* for permanent *structures*, roads, and other *development* are allowed only if the following conditions are met:

(A) The *development* or *fill* will not significantly adversely affect existing *sensitive biological resources* on-site or off-site;

(B) The *development* is capable of withstanding *flooding* and does not require or cause the construction of off-site *flood* protective works including artificial *flood* channels, revetments, and levees nor will it cause adverse impacts related to *flooding* of properties located upstream or downstream, nor will it increase or expand a *(FIRM)* Zone A;

(C) *Grading* and *filling* are limited to the minimum amount necessary to accommodate the proposed *development*, harm to the environmental values of the floodplain is minimized including peak flow storage capacity, and *wetlands* hydrology is maintained;

(D) The *development* neither significantly increases nor contributes to downstream bank erosion and sedimentation nor causes an increase in *flood* flow velocities or volume; and

(E) There will be no significant adverse water quality impacts to downstream wetlands, lagoons or other *sensitive biological resources*, and the *development* is in compliance with the requirements and regulations of the National Pollution Discharge Elimination System, as implemented by the City of San Diego.

(F) The design of the *development* incorporates the findings and recommendations of both a site specific and coastal watershed hydrologic study.

(2) All *development* that involves *fill*, *channelization*, or other alteration of a *Special Flood Hazard Area* is subject to the requirements for *channelization* in Section 143.0145(a)(5) and with FEMA regulations.

(Amended 4-22-2002 by O-19051 N.S.; effective 10-8-2002.)

§143.0146 Supplemental Regulations for Special Flood Hazard Areas

All proposed *development* within a *Special Flood Hazard Area* is subject to the following requirements and all other applicable requirements and regulations of FEMA.

(a) *Development* and Permit Review

(1) Where *base flood elevation* data has not been provided by the *Flood Insurance Study,* the City Engineer shall obtain, review, and utilize *base flood elevation* and *floodway* data available from federal or state sources, or require submittal of such data from the *applicant.* The City Engineer shall make interpretations, where needed, as to the location of the boundaries of the areas of the *Special Flood Hazard Area,* based on the best available engineering or scientific information.

(2) Proposed *development* in a *Special Flood Hazard Area* shall not adversely affect the *flood* carrying capacity of areas where *base flood elevations* have been determined but the *floodway* has not been designated. "Adversely affect" as used in this section means that the cumulative effect of the proposed *development*, when combined with all other existing and anticipated *development*, will not increase the water surface elevation of the *base flood* more than one foot at any point.

(3) In all cases where a watercourse is to be altered the City Engineer shall do the following:

(A) Notify affected, adjacent communities and the California Department of Water Resources of any proposed alteration or relocation of a watercourse and submit evidence of the notice to the Federal Insurance Administration;

(B) Require that the *flood* carrying capacity of the altered or relocated portion of the watercourse is maintained; and

(C) Secure and maintain for public inspection and availability the *certifications*, appeals, and variances required by these regulations.

(4) The *applicant* shall grant a flowage easement to the City for that portion of the property within a *floodway.*

(5) Appropriate agreements shall be secured between the *applicant* and the City to assure participation by the *applicant* or any successor in interest in financing of future *flood* control works.

(6) *Development* in a *Special Flood Hazard Area* shall not increase or expand a *FIRM* Zone A.

(7) In all *floodways*, any *encroachment*, including *fill*, new construction, significant modifications, and other *development* is prohibited unless *certification* by a registered professional engineer is provided demonstrating that *encroachments* will not result in any increase in *flood* levels during the occurrence of the *base flood* discharge.

(b) Standards for *Subdivisions*

(1) All preliminary *subdivision* proposals shall identify the *Special Flood Hazard Area* and the elevation of the *base flood.*

(2) All final *subdivision maps* shall provide the elevation of proposed *structures* and pads. If the site is *filled* above the *base flood elevation*, the *lowest floor*, including *basement*, shall be certified to be 2 feet above the *base flood elevation* by a registered professional engineer or surveyor, and the *certification* shall be provided to the City Engineer.

(3) All *subdivisions* shall be designed to minimize *flood* damage.

(4) All *subdivisions* shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize *flood* damage.

(5) All *subdivisions* shall provide adequate drainage to reduce exposure to *flood* hazards.

(6) The final map shall bear the notation "Subject to Inundation" for those portions of the property with a *grade* lower than 2 feet above the *base flood elevation.*

(c) Standards of Construction

In all *Special Flood Hazard Areas*, the following standards apply for all *development.*

(1) All permitted, permanent *structures* and other significant improvements shall be anchored to prevent flotation, collapse, or lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

(2) All permitted permanent *structures* and other significant improvements shall be constructed with materials and utility equipment resistant to *flood* damage.

(3) Construction methods and practices that minimize *flood* damage shall be used.

(4) All electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities shall be designed and located to prevent water from entering or accumulating within the equipment components during conditions of *flooding*.

(5) *Breakaway walls* shall be certified by a registered engineer or architect to meet all applicable FEMA requirements. The *certification* shall be provided to the City Engineer before final inspection approval.

(6) New construction or *substantial improvement* of any *structure* shall have the *lowest floor*, including *basement*, elevated at least 2 feet above the *base flood elevation*. Upon completion of the *development*, the elevation of the *lowest floor*, including *basement*, shall be certified by a registered professional engineer or surveyor to be properly elevated. The *certification* shall be provided to the City Engineer before final inspection approval. The City Engineer reserves the right to require a preliminary *certification* before foundation inspection approval.

(7) New construction or *substantial improvement* of any *structure* in *FIRM* Zone AH or AO shall have the *lowest floor*, including *basement*, elevated above the highest adjacent *grade* at least 2 feet higher than the depth number specified on the *FIRM*, or at least 4 feet if no depth number is specified. Upon the completion of the *structure* the elevation of the *lowest floor*, including *basement*, shall be certified by a registered professional engineer or surveyor, to be properly elevated. The *certification* shall be provided to the City Engineer before final inspection approval. The City Engineer may require a preliminary *certification* before foundation inspection approval.

(8) Permitted nonresidential construction shall either be elevated as required by Section 143.0146(c)(6) or (7) or, together with attendant utility and sanitary facilities, meet the flood proofing requirements of FEMA. *Certification* by a registered professional engineer or architect that such requirements are met shall be provided to the City Engineer before final inspection approval. The City Engineer may require a preliminary *certification* before foundation inspection approval.

(9) Fully enclosed areas below the *lowest floor* that are subject to *flooding* shall be certified by a registered professional engineer or architect that they comply with the flood proofing requirements of FEMA. The *certification* shall be provided to the City Engineer before final inspection approval.

(d) Standards for *Manufactured Homes*

All new and replacement *manufactured homes* and additions to *manufactured homes* are subject to the following regulations.

(1) The *lowest floor* shall be elevated at least 2 feet above the *base flood elevation.*

(2) *Manufactured homes* shall be securely anchored to a permanent foundation system to resist flotation, collapse, or lateral movement.

(3) A registered engineer or architect must certify that the conditions of this subsection have been met. The *certification* shall be provided to the City Engineer before final inspection approval.

(e) Standards for Utilities

Certification shall be provided to the City Engineer before final inspection approval that the following requirements have been met.

(1) All new and replacement water supply and sanitary sewage systems shall be designed to minimize or eliminate infiltration of *flood* waters into the system and discharge from systems into *flood* waters.

(2) On-site waste disposal systems shall be located and designed to avoid impairment to them or contamination from them during *flooding*.

(f) The City Engineer shall notify the San Diego District Offices of the Coastal Commission of any pending changes to the adopted Flood Insurance Rate Maps affecting property within the Coastal Overlay Zone when the City Engineer receives notification of such potential changes. The City Engineer shall notify the Commission staff when *costal development* within the City of San Diego's Coastal

Development Permit jurisdiction would require processing a change to the FIRM maps. The City Engineer shall assure the Commission's District Office has the most current effective Flood Insurance Rate Maps approved by FEMA by forwarding any revised maps affecting the Coastal Overlay Zone within thirty working days of City Engineer's receipt.

(Amended 4-22-2002 by O-19051 N.S.; effective 10-8-2002.)

§143.0150 Deviations from Environmentally Sensitive Lands Regulations

Plans submitted in accordance with this section shall, to the maximum extent feasible, comply with the regulations of this division. If a proposed *development* does not comply with all applicable development regulations of this division and a deviation is requested as indicated in Table 143-01A, the Planning Commission may approve, conditionally approve, or deny the proposed Site Development Permit in accordance with Process Four, subject to the following:

(a) Deviations from the regulations of this division may be granted only if the decision maker makes the *findings* in Section 126.0504(c).

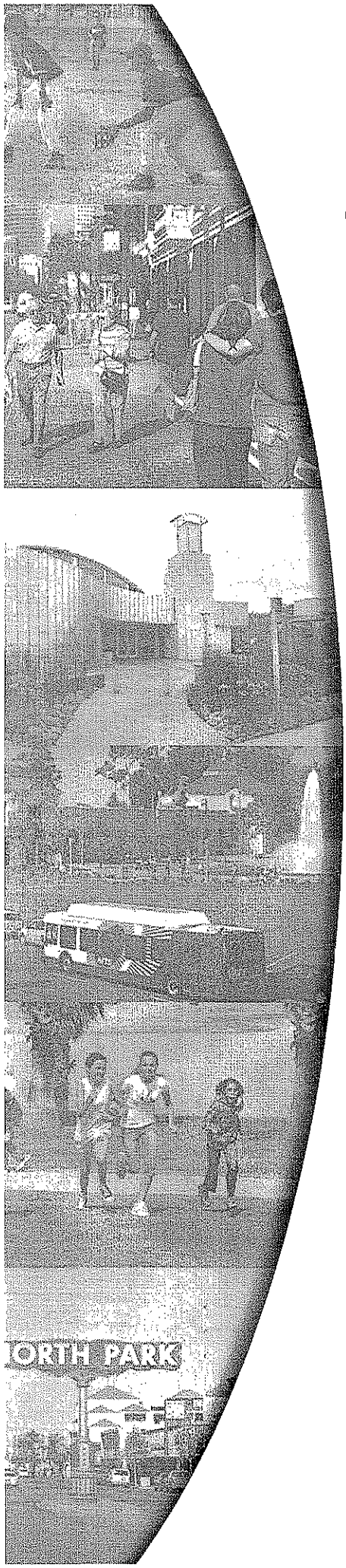
(b) Deviations from the Supplemental Regulations for Special Flood Hazard Areas in Section 143.0146 may be granted only if the decision maker makes the *findings* in Section 126.0504(d).

(c) Within the Coastal Overlay Zone, deviations from the Environmentally Sensitive Lands Regulations may be granted only if the decision maker makes the *findings* in Section 126.0708.

(Amended 4-22-2002 by O-19051 N.S.; effective 10-8-2002.)

ATTACHMENT E

Excerpts from City of San Diego General Plan



EXCERPTS FROM:

City of San Diego General Plan

CITY OF VILLAGES

Adopted by the:
Council of the City of San Diego
March 10, 2008

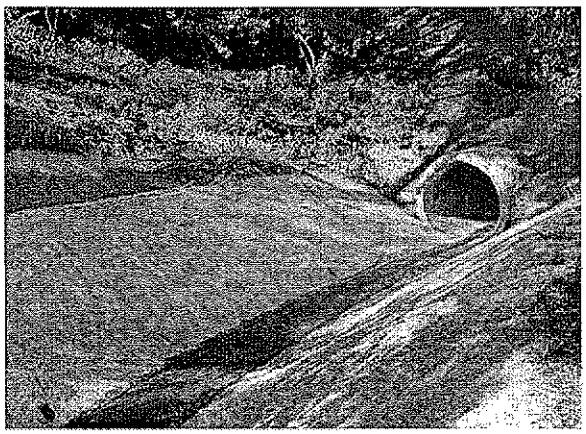
Resolution Number: R-303473

G. Storm Water Infrastructure

Goals

- Protection of beneficial water resources through pollution prevention and interception efforts.
- A storm water conveyance system that effectively reduces pollutants in urban runoff and storm water to the maximum extent practicable.

Discussion



City of San Diego storm drain

The City's storm water pollution prevention efforts and conveyance system strive to protect the quality of our recreational waters and potable water resources as mandated by the federal Clean Water Act of 1972 and the San Diego Regional Water Quality Control Board. The City also maintains compliance with the Water Quality Control Plan for the San Diego Region 9 also referred to as the Basin Plan, and with storm water permits. These functions require a multi-faceted approach that couples infrastructure improvements and maintenance, water quality monitoring, source identification of pollutants, land use planning policies and regulations, and pollution prevention activities such as education, code enforcement, outreach, public advocacy, and training. Additional discussion on Urban Runoff Management, Section E, is included in the Conservation Element.

The City has 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. Many storm water infrastructure projects do not have the opportunity to affect site design or implement other means to keep pollutants from entering storm drain flows. Therefore, prevention through education, outreach, code enforcement, and other efforts continues to be the most effective method of protecting water resources. Secondly, capital improvement investments in storm water structures (curbs, gutters, inlets, catch basins, pipes, and others) determined through Best Management Practices (BMP) are critical in order to reduce pollutant loading to acceptable levels. Public projects should be evaluated for their impact on the storm drain conveyance system and incorporate storm water quality and conveyance structures during the design process. Similarly, private development will mitigate the impacts of its development on the storm water conveyance system while overall system monitoring including the identification of needs is also performed by the City.

In addition to capital investments in storm water structures, operations and maintenance are equally critical to ensure governmental compliance and clean water resources. Furthermore, state regulations require that the City keep track of storm water structure locations and maintenance via inspections, and in some cases, collection and/or reporting of storm water quality monitoring data. The storm drain fee and other sources of funds are instrumental in ensuring compliance with legal mandates and maintaining storm water prevention and conveyance functions.

Policies

PF-G.1. Ensure that all storm water conveyance systems, structures, and maintenance practices are consistent with federal Clean Water Act and California Regional Water Quality Control Board NPDES Permit standards.

PF-G.2. Install infrastructure that includes components to capture, minimize, and/or prevent pollutants in urban runoff from reaching receiving waters and potable water supplies.

PF-G.3. Meet and preferably exceed regulatory mandates to protect water quality in a cost-effective manner monitored through performance measures.

PF-G.4. Develop and employ a strategic plan for the City's watersheds to foster a comprehensive approach to storm water infrastructure improvements.

PF-G.5. Identify and implement BMPs for projects that repair, replace, extend or otherwise affect the storm water conveyance system. These projects should also include design considerations for maintenance, inspection, and, as applicable, water quality monitoring.

PF-G.6. Identify partnerships and collaborative efforts to sponsor and coordinate pollution prevention BMPs that benefit storm water infrastructure maintenance and improvements.

Open space that is designated in community plans and other land use plans is an important component of the open space system because of its value in protecting natural landforms, defining community boundaries, providing natural linkages between communities, providing visually appealing open spaces, and protecting habitat and biological systems of community importance that are not otherwise included in the MHPA.

Policies

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.

b. 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.

CE-B.3. Use natural landforms and features as integrating elements in project design to complement and accentuate the City's form (see also Urban Design Element, Section A).

CE-B.4. Limit and control runoff, sedimentation, and erosion both during and after construction activity.

CE-B.5. Maximize the incorporation of trails and greenways linking local and regional open space and recreation areas into the planning and development review processes.

CE-B.6. Provide an appropriate defensible space between open space and urban areas through the management of brush, the use of transitional landscaping, and the design of structures (see also Urban Design Element, Policy UD-A.3.o). Continue to implement a citywide brush management system.

The following policies address land development practices for erosion control, decreased use of impervious surfaces, and design that captures or reduces runoff from development sites. The policies also provide a summary of the City's overall water quality protection policies.

Policies

CE-E.1. Continue to develop and implement public education programs.

a. Involve the public in addressing runoff problems associated with development and raising awareness of how an individual's activities contribute to runoff pollution.

b. Work with local businesses and developers to provide information and incentives for the implementation of Best Management Practices for pollution prevention and control.

c. Implement watershed awareness and water quality educational programs for City staff, community planning groups, the general public, and other appropriate groups.

CE-E.2. Apply water quality protection measures to land development projects early in the process-during project design, permitting, construction, and operations-in order to minimize the quantity of runoff generated on-site, the disruption of natural water flows and the contamination of storm water runoff.

a. Increase on-site infiltration, and preserve, restore or incorporate natural drainage systems into site design.

b. Direct concentrated drainage flows away from the MHPA and open space areas. If not possible, drainage should be directed into sedimentation basins, grassy swales or mechanical trapping devices prior to draining into the MHPA or open space areas.

c. Reduce the amount of impervious surfaces through selection of materials, site planning, and street design where possible.

d. Increase the use of vegetation in drainage design.

e. Maintain landscape design standards that minimize the use of pesticides and herbicides.

f. Avoid development of areas particularly susceptible to erosion and sediment loss (e.g., steep slopes) and, where impacts are unavoidable, enforce regulations that minimize their impacts.

g. Apply land use, site development, and zoning regulations that limit impacts on, and protect the natural integrity of topography, drainage systems, and water bodies.

h. Enforce maintenance requirements in development permit conditions.

CE-E.3. Require contractors to comply with accepted storm water pollution prevention planning practices for all projects.

a. Minimize the amount of graded land surface exposed to erosion and enforce erosion control ordinances.

b. Continue routine inspection practices to check for proper erosion control methods and housekeeping practices during construction.

CE-E.4. Continue to participate in the development and implementation of Watershed Management Plans for water quality and habitat protection.

CE-E.5. Assure that City departments continue to use "Best Practice" procedures so that water quality objectives are routinely implemented.

a. Incorporate water quality objectives into existing regular safety inspections.

b. Follow Best Management Practices and hold training sessions to ensure that employees are familiar with those practices.

c. Educate City employees on sources and impacts of pollutants on urban runoff and actions that can be taken to reduce these sources.

d. Ensure that contractors used by the City are aware of and implement urban runoff control programs.

e. Serve as an example to the community-at-large.

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.

CE-E.7. Manage floodplains to address their multi-purpose use, including natural drainage, habitat preservation, and open space and passive recreation, while also protecting public health and safety.