

**DRAFT COMPLIANCE PLAN
LA JOLLA AREA OF SPECIAL BIOLOGICAL SIGNIFICANCE**

**Submitted to:
State Water Resources Control Board**

**Submitted by:
City of San Diego**

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ACRONYMS AND ABBREVIATIONS

ASBS	area of special biological significance
ASBS 29	La Jolla ASBS
ASBS 31	San Diego—Scripps ASBS
Bacteria TMDL	Revised Total Maximum Daily Loads for Indicator Bacteria
Bight '08	Southern California Bight 2008 Regional Monitoring Survey
Bight '13	Southern California Bight 2013 Regional Monitoring Survey
BMP	best management practice
City	City of San Diego
CLRP	comprehensive load reduction plan
CSDM	coastal storm drain monitoring
FY	(City) fiscal year
General Exception	Resolution Number 2012-0012 (SWRCB, 2012b) re exceptions to Ocean Plan
HA	hydrologic area
HOA	homeowners' association
IC	illicit connection
ID	illicit discharge
JURMP	jurisdictional urban runoff management program
LID	low-impact development
MLS	mass loading station
MS4	municipal separate storm sewer system
NPDES	National Pollutant Discharge Elimination System
old NPDES MS4 Permit	Order Number R9-2007-0001 (SDRWQCB, 2007)
new NPDES MS4 Permit	Order Number R9-2013-0001 (SDRWQCB, 2013b)
Ocean Plan	Water Quality Control Plan for Ocean Waters of California (SWRCB, 2009)
PFEIR	Program Final Environmental Impact Report (PFEIR) (SWRCB, 2012a)
PGA	Pollutant-Generating Activities
Project SWELL	Project Stewardship: Water Education for Lifelong Leadership
RWQCB	(California) Regional Water Quality Control Board
SCCWRP	Southern California Coastal Water Research Project
SDRWQCB	California Regional Water Quality Control Board San Diego Region
SIO	Scripps Institute of Oceanography
SMC	Storm Water Monitoring Coalition
SUSMP	standard urban storm water mitigation plan
SWMP	storm water management plan
SWPPP	storm water pollution prevention plan
SWRCB	(California) State Water Resources Control Board

ACRONYMS AND ABBREVIATIONS (continued)

TCBMP	treatment control best management practice
TWAS	temporary watershed assessment station
USEPA	United States Environmental Protection Agency
La Jolla Watershed	La Jolla Shores Coastal Watershed
Scripps Watershed	Scripps Hydrologic Area (HA 906.30)
WERF	Water Environment Research Foundation
WQIP	water quality improvement plan
WQO	water quality objective
WURMP	watershed urban runoff management program

1.0 INTRODUCTION AND BACKGROUND

This Draft Compliance Plan applies to the La Jolla Area of Special Biological Significance (ASBS 29) and how it is environmentally affected by storm water discharges and associated potential contaminants. Specifically, the plan describes the approach of the City of San Diego (City) to comply with the requirements of Resolution Number 2012-0012¹ of the State Water Resources Control Board (SWRCB), *Approving Exceptions to the California Ocean Plan for Selected Discharges into Areas of Special Biological Significance, Including Special Protections for Beneficial Uses, and Certifying a Program Environmental Impact Report (2012b)* (General Exception).

The following sections describe the regulatory framework for this Draft Area of Special Biological Significance (ASBS) Compliance Plan.

1.1 Storm Water Regulation

The Clean Water Act (CWA), which was adopted in 1972, prohibits point sources of discharges, such as storm water, into waters of the United States (U.S.) unless the discharge complies with the National Pollutant Discharge Elimination System (NPDES) program. The U.S. Environmental Protection Agency (USEPA) authorizes the SWRCB to administer the NPDES program under CWA Section 402. Similarly, the SWRCB authorizes the Regional Water Quality Control Boards (RWQCBs) to issue NPDES permits for storm water discharges.

Storm water runoff is commonly transported through a municipal separate storm sewer system (MS4). These drainage systems typically discharge water (and any potential pollutants) directly into streams, bays, and/or the ocean. The San Diego RWQCB (SDRWQCB) has developed a revised NPDES MS4 Permit (SDRWQCB, 2013b) that regulates MS4 discharges from municipalities such as the City.

The NPDES MS4 Permit requires the City to conduct multiple activities including:

- Identify major outfalls and pollutant loadings.
- Detect and eliminate all non-storm water discharges to the MS4, except as specifically and legally exempted.
- Prevent and reduce pollutants in runoff from industrial, commercial, and residential areas by implementing Best Management Practices (BMPs).
- Control storm water discharges from new development and redevelopment.
- Inspect industrial, commercial, and construction activities.
- Provide pertinent education and promote public reporting of pollution.
- Monitor discharges and impacts on receiving waters.

¹ Resolution 2012-0012 was subsequently revised under Resolution 2012-0031 (SWRCB, 2012d). The only change was a correction of the compliance timeframe from four years to six years.

In 1974, the SWRCB designated 34 regions along the coast of California as ASBS under Resolution Number 74-28 (SWRCB, 1974). These ASBS are “areas designated by the SWRCB as ocean areas requiring protection of species or biological communities to the extent that alteration of natural water quality is undesirable.” (SWRCB, 2012b)

Two areas within the City’s jurisdiction are designated ASBS:

- ASBS 29, the La Jolla ASBS (off the coast of La Jolla Shores)
- ASBS 31, the San Diego–Scripps ASBS

The City is the sole discharger to ASBS 29, and the University of California San Diego Scripps Institution of Oceanography (UCSD–SIO) is the sole discharger to ASBS 31.

Section 13170.2 of the *California Water Code* requires the SWRCB to prepare and adopt a *Water Quality Control Plan for Ocean Waters of California* (last revised, 2009a) (Ocean Plan). The Ocean Plan establishes water quality objectives (WQOs) that are the basis of regulating point source and non-point source waste discharges into coastal waters. The Ocean Plan prohibits all discharges to an ASBS and requires discharge points to be located a sufficient distance from an ASBS to maintain natural water quality conditions; however, the SWQCB can issue permits that exempt certain discharges to an ASBS.

In March 2012, the SWRCB adopted the General Exception (SWRCB, 2012b) that exempts certain listed dischargers. The General Exception authorizes the City to discharge into ASBS 29, provided that it:

- Complies with the NPDES MS4 Permit.
- Conducts the monitoring outlined in the permit.
- Includes an ASBS Compliance Plan in its Storm Water Management Plans (SWMPs) and Storm Water Pollution Prevention Plans (SWPPPs).

1.2 Document Organization

1.2.1 General Compliance

In general, this Draft ASBS Compliance Plan:

- Addresses the prohibition of non-storm water runoff and the requirement to maintain natural water quality for storm water discharges to ASBS 29, according to Section I.A.2 of the General Exception.
- Serves as the ASBS Pollution Prevention Plan required for non-point source discharges, according to Section I.B.2 of the General Exception.
- Describes the City’s strategy to comply with the General Exception.
- Will be updated according to Sections I.A.2.h and I.B.2.c of the General Exception.

1.2.2 Specific Compliance

Specifically, this Draft ASBS Compliance Plan:

- Describes the measures by which non-authorized, non-storm water runoff has been eliminated by the City, and how these measures will be maintained, monitored, and documented.
- Includes minimum frequencies for inspection of MS4s.
- Addresses storm water discharges and, in particular, describes how pollutant reductions in storm water runoff will be achieved by implementing BMPs.
- Addresses erosion control and the reduction and/or prevention of anthropogenic sedimentation in the ASBS.
- Describes the City's nonstructural and structural BMPs currently employed and those planned in the future, including an implementation schedule for the City's SWMP and SWPPP.

1.2.3 General Exception Requirements

Requirements of this Draft ASBS Compliance Plan per the General Exception are addressed in sections of this report as noted below:

Section 1—Introduction: Describes California discharge regulations, ASBS specific requirements, compliance actions, and the organization of this Draft ASBS Compliance Plan; does not address any specific section of the General Exception.

Section 2—Discharges to the La Jolla ASBS: Identifies discharges to ASBS 29, and specifically addresses the prohibition of non-storm water runoff and the requirement to maintain natural water quality for storm water discharges to an ASBS; describes measures by which all non-authorized, non-storm water runoff has been eliminated, how these measures will be maintained over time, and how these measures are monitored and documented; and identifies storm water runoff from the City's Parks and Recreation facilities. (Addresses Sections I.A.2.a and I.B.2.b of the General Exception.)

Section 3—Prioritization of Discharges: Identifies municipal and industrial storm water discharges and prioritizes them based on risk to water quality, and incorporates data from storm water runoff and ocean receiving water monitoring. (Addresses Section I.A.2.a of the General Exception.)

Section 4—Erosion Potential and Control: Addresses erosion control and the prevention of anthropogenic sedimentation in ASBS 29. (Addresses Section I.A.2.e of the General Exception.)

Section 5—Implemented BMPs: Describes existing nonstructural BMPs, including an education and outreach program; and describes existing structural BMPs and the role of structural BMPs. (Addresses Sections I.A.2.b, I.A.2.c, I.A.2.f, and I.B.2.b of the General Exception.)

Section 6—Planned and Proposed BMPs: Describes planned and proposed nonstructural and structural BMPs, and the role of BMPs in maintaining natural water quality. (Addresses Sections I.A.2.b, I.A.2.d, I.A.2.f, I.A.2.g, and I.B.2.b of the General Exception.)

Section 7—Discharge Requirements for Parks and Recreation Facilities: Identifies pollutant sources in parks and recreation facilities that may result in waste entering storm water runoff; and describes BMPs or management measures and practices to prevent pollutants from entering storm water runoff. (Addresses Section II of the General Exception.)

Section 8—Compliance and Implementation Schedule: Provides the compliance schedule, and BMP implementation schedule; mandates submitting a report if receiving water monitoring indicates that discharges are altering natural conditions; and describes the procedures for revising the ASBS Compliance Plan to maintain compliance with the General Exception. (Addresses Sections I.A.2.g, I.A.2.h, I.A.3, I.B.2.c, and I.B.3 of the General Exception.)

Section 9—References: Presents documents referenced in the development of this Draft ASBS Compliance Plan.

2.0 Discharges to the La Jolla ASBS

2.1 La Jolla Watershed

ASBS 29 is located off the northern coast of the Scripps Hydrologic Area (HA) (HA 906.30) (Scripps Watershed) in the La Jolla Shores Coastal Watershed (La Jolla Watershed). The ASBS 29 drainage area is approximately 1,600 acres and extends from the Pacific Ocean shoreline to an elevation of approximately 243 meters (800 feet) at Mount Soledad. Drainage into the ASBS flows from MS4 storm water outfalls, direct (non-MS4) discharges from overland sheet flow, and natural drainage features (SIO et al., 2008). The primary land use is residential and institutional (e.g., the UCSD–SIO campus).

The MS4 storm water outfalls are point sources of storm water runoff into receiving waterbodies, regulated by the NPDES MS4 Permit (discussed in Section 1). The location and density of these outfalls generally indicate the significance of storm-water-based sources in the drainage area. The degree of urbanization and imperviousness of a drainage area dictate the amount of storm water that is conveyed directly to the MS4 and into receiving waters. Contributing land use activities include, but are not limited to, landscaping, car washing, pet waste, and vehicle wear (City, 2012c).

The conditions in the General Exception are designed to protect beneficial uses of the receiving water yet allow continuation of essential public services, such as flood control, slope stability, erosion prevention, maintenance of the natural hydrologic cycle between terrestrial and marine ecosystems, public health and safety, public recreation and coastal access, commercial and recreational fishing, navigation, and essential military operations (national security) (SWRCB, 2012b).

2.2 Dry Weather Flows

Non-storm water discharges are prohibited under the General Exception. The only discharges allowed are those that are essential for emergency response purposes, structural stability, or slope stability, or those that occur naturally. Landscape irrigation in the La Jolla Watershed is a high-water-use activity. Over-irrigation often results in dry weather urban runoff that transports pollutants from impervious surfaces (such as roadways and parking lots) and deposits them into the ASBS. These pollutants include sediment, bacteria, nutrients, and metals.

The City's major measures to reduce or eliminate non-storm water discharges include constructing low-flow diversion projects, reducing irrigation runoff, incentivizing smart gardening and water conservation (such as bioretention systems), and promoting rain barrels and downspout disconnections. The City also investigates illicit connections and illicit discharges (IC/ID) in response to flows that exceed the water quality criteria during routine dry weather sampling.

The City's programs to eliminate non-storm water discharges and reduce or control pollutant sources that drain into the ASBS are discussed further in Section 6.

2.3 Storm Water Discharges (Wet Weather Flows)

Under the General Exception, the only permitted point source discharges of storm water are those authorized by the general exception or by an NPDES permit issued by the SWRCB or RWQCB. Per the General Exception, the only allowed discharges to the ASBS are those from existing storm water outfalls, and the discharges must comply with all of the applicable terms, prohibitions, and special conditions in the General Exception.

Because of urbanization, steep slopes, and a highly developed storm drain network in the upper reaches of the system, the La Jolla Watershed responds quickly to rainfall events, when fast-moving storm water surges downstream. Most of the runoff from the ASBS 29 drainage area is conveyed through a network of storm drains before it is discharged at several locations along the shoreline into the ASBS. Most of the runoff enters the City's NPDES permitted MS4 through curb inlets in public streets or through catch basins at the lower (western) ends of open space and undeveloped areas. Runoff is then discharged into the ASBS via outfalls along the shoreline. The largest of these outfalls are the Avenida de la Playa and the El Paseo Grande storm drains, which together drain more than 50 percent of the ASBS 29 drainage area to the Pacific Ocean.

Sheet flow is minimal, and is limited to the western end of Avenida de la Playa, the bluffs of the Devil's Slide area, and small portions of the boardwalk. Although no streams flow directly into the ASBS, natural drainage features discharge some urban runoff from cliffs or directly onto beaches (SIO et al., 2008). Other discharges to the ASBS originate from private homes discharging via pipes, outfalls, and weep holes embedded in the sea walls.

Figure 2-1 shows the locations of storm water outfalls to the ASBS and the City's MS4 in the La Jolla Watershed.

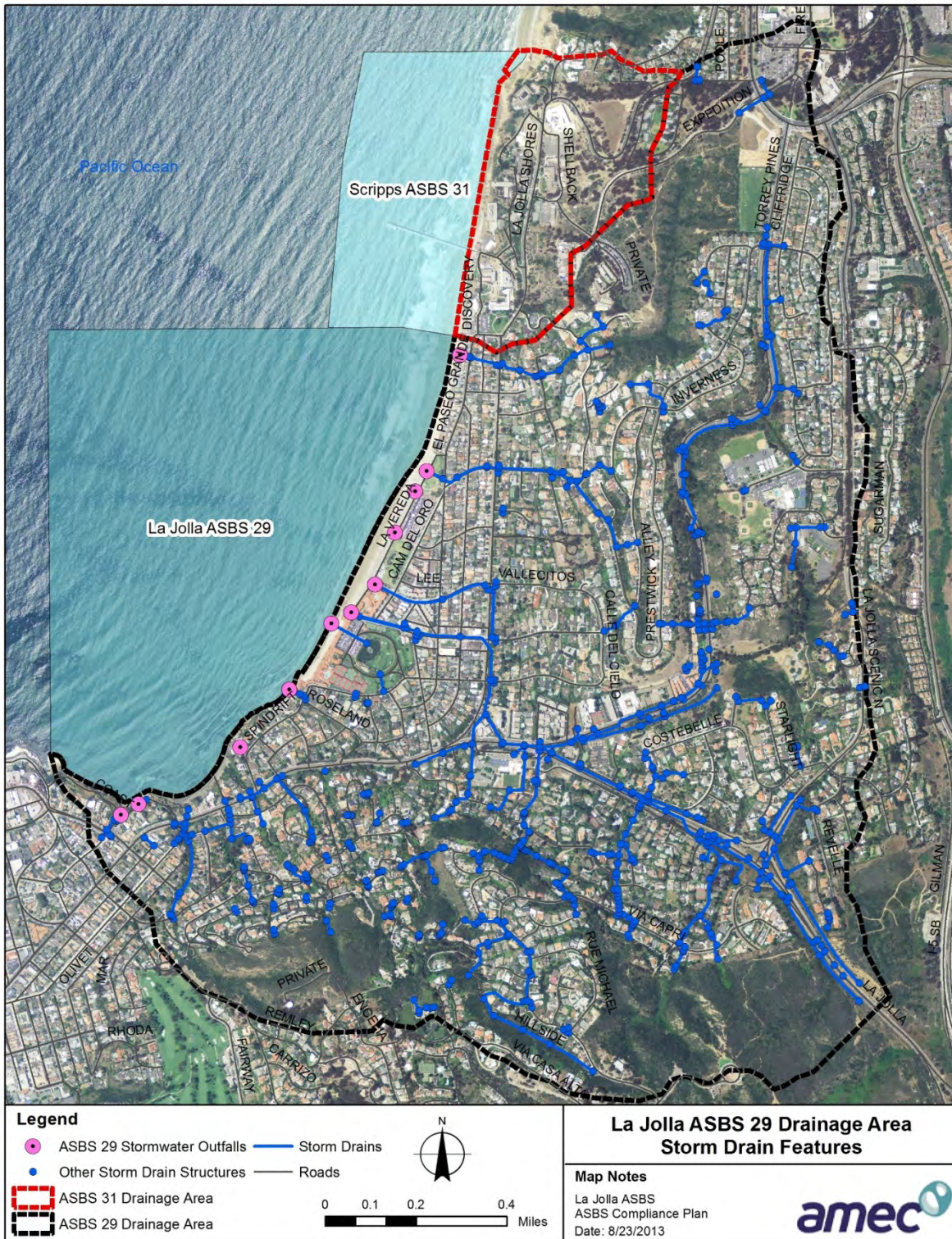


Figure 2-1: La Jolla Shores Coastal Watershed and ASBS 29 with MS4 Outfall Locations

2.4 Parks and Recreation Facilities Discharges

Parks and recreation facilities are a potential source of pollutants in the ASBS 29 drainage area. Overwatering landscaped areas increases the potential for fertilizer, herbicides, and pesticides to be conveyed into the City's MS4. Parking lots in parks and recreation facilities are potential sources of heavy metals, oil, and sediment. In addition, pet waste that not properly disposed of in parks is a major source of pathogenic bacteria and other parasites. As a result, identifying parks and recreation facilities and their associated potential pollutant sources is important when addressing storm water pollutant mitigation measures.

There are five parks in the ASBS 29 drainage area maintained by the City's Parks and Recreation Department, as briefly described below.

- **Kellogg Park and La Jolla Shores Beach Park** (at 2112 Vallecitos and 8200 Camino del Oro, respectively, totaling 13.42 acres) are, given their proximity and overlapping public use, discussed herein as one large park. Kellogg Park is a long, grassy area that parallels La Jolla Shores Beach Park; the two are separated by a palm-tree-lined, concrete boardwalk. Amenities include a children's playground, picnic tables, grills, restrooms, showers, and a free parking lot. In summer, waves at La Jolla Shores beach are usually the most gentle of all of San Diego's beaches, attracting many residents and tourists alike. La Jolla Shores is adjacent to the San Diego La Jolla Underwater Park Ecological Reserve.
- **Cliffridge Park** (10.90 acres at 8311 Cliffridge Avenue) is located among a residential neighborhood, the La Jolla Young Men's Christian Association (YMCA), and Torrey Pines Elementary School. To the west is a natural hillside that descends to Torrey Pines Road. The park features athletic fields, including four baseball diamonds, one tee-ball field, and two lined soccer fields within the outfield of the baseball fields. Other amenities are a food concession stand, picnic tables, and restrooms.
- **Laureate Mini-Park** is a small (0.81-acre) neighborhood park at the intersection of Avenida de la Playa and El Paseo del Ocaso in La Jolla. Mini-parks are generally open spaces with 0.5 to 1.5 acres of play area and serve a neighborhood.
- **La Jolla Athletic Area (Allen Field)** (6.41 acres on Torrey Pines Road, south of Expedition Way) is a grass athletic field, primarily dedicated to soccer fields used by the La Jolla Youth Soccer League. This park is leased to La Jolla Youth, Inc., which is responsible for park maintenance. An office building in the park is the soccer league's offices and clubhouse, and three portable toilets are located behind the building.

Potential pollutant sources and the management measures and practices implemented to address storm water runoff at each park are discussed in Section 7.

3.0 Priority Discharges

The General Exception requires the Draft ASBS Compliance Plan to include a map indicating the priority of discharges. High-priority discharges are those that pose the greatest threat to water quality and that have been identified as requiring the installation of structural BMPs. This section discusses the three high-priority discharges identified within ASBS 29.

3.1 Evaluation of Discharges

SWRCB staff issued a Program Final Environmental Impact Report (PFEIR) (SWRCB, 2012a) that evaluates the potential environmental effects of the adoption and implementation of the proposed statewide General Exception to the Ocean Plan waste discharge prohibition. Appendix 5 of the PFEIR includes the results of an assessment of discharges to ASBS conducted by Southern California Coastal Water Research Project (SCCWRP, 2003) between March 2001 and February 2003; discharges were documented within 100 meters (328 feet) of the high tide lines. Appendix 5 also includes water quality threat levels designated for the surveyed discharges.

The City evaluated the discharges within ASBS 29 to determine the high-priority discharges, based on multiple factors:

- Appendix 5 of the PFEIR
- Size of outfall or discharge
- Available monitoring data
- Drainage area size and land use
- Practicality and safety of structural BMP placement and monitoring (e.g., access limitations to bluffs)

Three outfalls are designated as high threats to water quality, and so are potentially subject to additional management measures: SDL062, SDL063, and SDL157 (see Figure 3-1).

Table 3-1: ASBS 29 High-Priority Discharges

Outfall	Longitude	Latitude	Upstream Source	Shape	Diameter/Width (m)	Discharges Onto
SDL062	-117.2589	32.8546	Urban watershed	Rectangular	5.00	Beach
SDL063	-117.2582	32.8556	Urban watershed	Rectangular	1.00	Beach
SDL157	-117.25485	32.8628	Urban watershed	Round	1.00	Beach

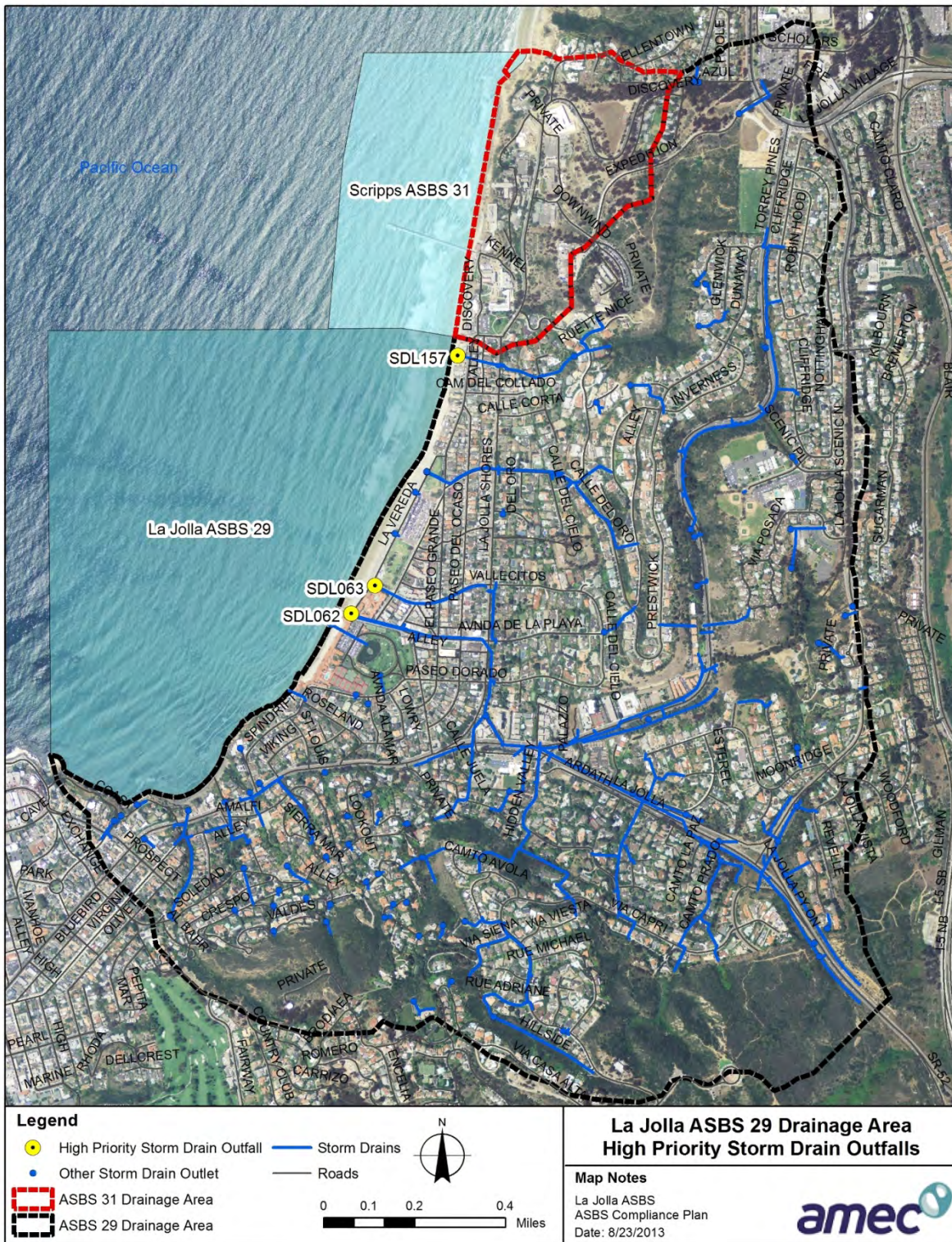


Figure 3-1: Storm Drain Prioritization Map

3.2 Historic and Current Monitoring

The City has participated extensively in monitoring storm water runoff and receiving waters in order to:

- Provide a means to evaluate the environmental risks of storm water discharges by identifying types and amounts of pollutants present.
- Determine the relative potential for storm water discharges to impact water quality.
- Identify potential sources of pollutants.
- Eliminate or control identified sources through management actions.
- Assess the effectiveness of permit conditions and storm water management plans.

Monitoring through these programs, though not always regulation-driven, is conducted to assess the effectiveness of measures implemented to protect the water quality and ASBS beneficial uses. Water quality monitoring conducted under several countywide, regulatory monitoring programs includes:

- Coastal Storm Drain Monitoring (CSDM) Program
- Storm Water Monitoring Coalition (SMC) Regional Bioassessment
- Dry Weather Monitoring under the Jurisdictional Urban Runoff Management Program (JURMP)
- AB 411 (Wayne) Beach Sanitation Posting
- Revised Total Maximum Daily Loads for Indicator Bacteria, Project 1–Twenty Beaches and Creeks in the San Diego Region (Bacteria TMDL) (SDRWQCB, 2010)

The results of these programs are presented in the *San Diego County Copermittees Annual Urban Runoff Monitoring Report* and the *2005-2010 San Diego Storm Water Copermittees Long-Term Effectiveness Assessment Report* (San Diego County Copermittees, 2011). No MLS or TWAS sites are in the Scripps Watershed, which thereby limits water quality analysis to the review of special studies in the La Jolla Watershed area, which are often associated with ASBS compliance and characterization.

To be in compliance with the Core Discharge Monitoring Program aspect of the General Exception, responsible parties currently discharging to the ASBS are required to monitor storm water at outfalls that are at least 18 inches in diameter. Five storm drains in the City's jurisdiction that drain to ASBS 29 have been voluntarily monitored by the City for multiple wet weather seasons prior to and in accordance with the monitoring requirements of the General Exception. The City's voluntary and required monitoring in ASBS 29 has created a multi-year data set, particularly with respect to the largest outfall, at Avenida de la Playa. Under the new NPDES MS4 Permit, Order Number R9-2013-0001 (SDRWQCB, 2013b), monitoring under the

CSDM and DWM programs will be discontinued. The City will continue to monitor in accordance with the General Exception, Section IV.

4.0 Erosion Potential and Control

La Jolla is underlain primarily by sedimentary rock with occasional outcrops of plutonic and metamorphic rocks. Small surficial landslides associated with expansible clay deposits of the Friars and Delmar Formations in the area are abundant. The shoreline along the ASBS is approximately 1.6 miles long. The northern 1.0 mile consists of fine sandy beaches; the southern 0.6 mile is composed of rocky boulders or ledges at the base of the cliffs, with one pebble beach in the Devil's Slide area. The northern three-fourths of the shoreline faces westward; the southernmost one-fourth faces northward (SWRCB, 1979).

The City Development Services Department has conducted a Seismic Safety Study (City, 2008) that contains a series of maps that identify likely geological hazards throughout the City. Based on these maps, Figure 4-1 shows unstable coastal bluffs, known landslide areas, and areas with slide-prone geology in the La Jolla Watershed.

Sediment has been identified as a targeted pollutant within the ASBS 29 drainage area. The most likely source of sediment is erosion of canyon and open space areas within the ASBS 29 drainage area. Development around open space areas has increased storm water flows and velocities, leading to higher rates of erosion. Sediment loading to storm water may result from land-disturbing activities at residences such as landscaping, construction, and exposed non-vegetated soils. Other potential sources of turbidity are urban and residential land uses, transportation uses, such as roads, highways, and parking lots, and coastal bluffs. Of these potential sources, construction activities would likely generate the largest sediment load. Road grit and finer particles not collected through street sweeping also contribute sediment to storm water.

4.1 Construction Activities

Permit restrictions apply to any construction project in the ASBS 29 drainage area that disturbs one or more acres of soil, or disturbs less than one acre but is part of a larger common plan of development that in total disturbs one or more acres. Such projects are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction and Land Disturbance Activities, Order 2009-0009-DWQ (SWRCB, 2009b) (Construction General Permit). This permit requires developing and implementing a SWPPP that contains a plan to prevent erosion and control sediment delivery to the MS4. The SWPPP must list BMPs that the discharger will use to treat or minimize storm water runoff and the placement of those BMPs.

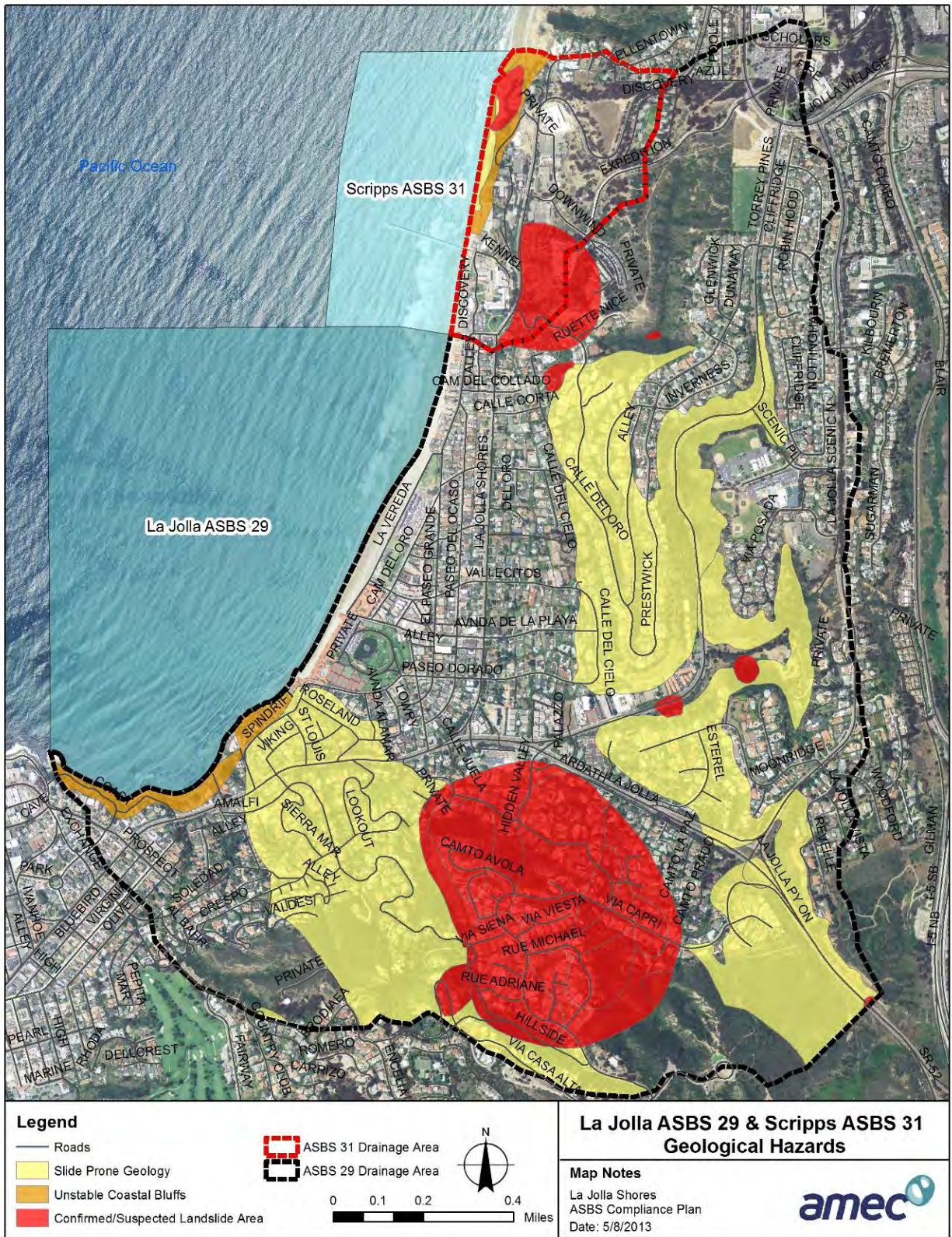


Figure 4-1: Erosion Potential Map

The City's *Storm Water Standards Manual* (City, 2012b) specifies permanent and construction-phase storm water quality requirements for the following project types and phases:

- Private projects processed through the City Development Services Department;
- Capital improvement projects processed through the City Engineering and Capital Projects Department; and
- Ongoing maintenance activities associated with permanent storm water facilities.

The *Storm Water Standards Manual* further guides developers in the selecting, designing, and incorporating storm water BMPs, which is helpful in addressing construction erosion and sediment controls.

4.2 Coastal Bluffs and Open Space Areas

Figure 4-1 shows the unstable coastal bluffs, which have the potential to deliver sediment to the ASBS. At the blufftops are private homes, other structures, and open space. Portions of undeveloped hillsides and bluffs further up in the La Jolla Watershed are exposed to wind and rain erosion, potentially contributing to sediment transported to the ASBS via roadways and the MS4. Because the beach is narrow and lacks a sand buffer, the bluffs along the shoreline are subjected to erosion from wave action, particularly during the winter months.

Development on coastal bluffs is subject to the environmentally sensitive lands regulations in the City's Municipal Code, which are intended to "assure that development occurs in a manner that protects the overall quality of the resources and the natural and topographic character of the area, encourages a sensitive form of development, retains biodiversity and interconnected habitats, maximizes physical and visual public access to and along the shoreline, and reduces hazards due to flooding in specific areas while minimizing the need for construction of flood control facilities (City, 2012d)." Private property owners are responsible for assessing their property's erosion problems and taking appropriate protection.

Natural open spaces, ravines, and canyons can generate sediment from erosion. Areas such as Pottery Canyon and La Jolla Heights Open Space have been designated as open space within La Jolla. Areas such as the slopes of Mount Soledad and Pottery Canyon are preserved to protect the environmentally sensitive resources of La Jolla, including its coastal bluffs, steep hillside slopes, canyons, native plant life, and wildlife habitat linkages.

Areas of open space designated as parks and recreation facilities under the management of the City, such as Cliffridge Park, are discussed in Section 7.

4.3 Control of Sediment Discharge

Natural wind and water erosion of open space areas can deposit sediment on roadways and other impervious surfaces. Sediment, road grit, and finer particles that accumulate on streets and parking lots from erosion, residential landscaping, and atmospheric deposition are addressed through street sweeping. The City's street sweeping program is discussed in more detail in Section 5.

5.0 Implemented Best Management Measures and Practices

The combined use of nonstructural and structural BMPs makes pollutant reduction more practical and effective. Nonstructural BMPs are designed to reduce pollutant loads before they enter the storm drain system. Source reduction strategies, such as addressing the discharge of trash and disposal of animal waste, often reduce multiple pollutants, including nutrients, sediment, and bacteria. Structural BMPs, including storm water infiltration systems and low-flow diversions, are designed to reduce pollutant loading by treatment and by reducing runoff volume via capture, retention, and infiltration.

The City's services include activities to maintain and improve City infrastructure and to reduce pollution entering the storm drain system. The City has several special projects and pilot studies to assess the most efficient and cost-effective way to prevent pollution in local beaches, bays, and creeks. Projects include both nonstructural and structural BMPs, such as outreach programs designed to educate and change the behaviors and attitudes of residents and business operators. Design and construction of low-impact development (LID) and capital improvement projects provide long-term benefits to the storm drain system, such as detention basins and porous (pervious) pavement. The City also offers inspection services for businesses to determine how best to reduce their impact on the storm drain system.

Table 5-1 summarizes the City's BMPs currently implemented or under development and their benefits.

Table 5-1: Summary of City-Implemented BMPs and Potential Benefits

Best Management Practice (BMP)	Pollutant Reduction & Prevention	Runoff Reduction & Elimination	Runoff Treatment	Erosion Control
<i>Nonstructural BMPs</i>				
Inspections	✓	✓		✓
Trash Management	✓			
Animal Waste Management	✓			
MS4 Cleaning	✓			
Street Sweeping	✓			
Channel and Slope Stabilization	✓			✓
Sanitary Sewerage Management	✓	✓		
Smart Gardening and Water Conservation	✓	✓		✓
Education and Outreach	✓	✓		✓
Pesticides and Other Chemical Management	✓			
<i>Structural BMPs</i>				
Low-Flow Diversions	✓	✓	✓	
Low-Impact Development (LID)	✓	✓	✓	✓

5.1 Implemented Nonstructural BMPs

Consistent with the Scripps Watershed Comprehensive Load Reduction Plan (CLRP), nonstructural BMP reduction strategies are actions and activities intended to reduce storm water

pollution that do not involve construction of a physical component or structure to filter and treat storm water (City, 2012c). Nonstructural BMPs also include landscape-based measures that involve construction and earth moving, but whose functions are not exclusively limited to storm water filtration or treatment.

This section describes currently implemented BMPs and/or management activities to protect ASBS water quality. Sections 5.1.1 through 5.1.9 describe nonstructural BMPs implemented in the La Jolla Watershed. Some nonstructural BMPs are implemented City-wide and are not exclusive to the ASBS 29 drainage area.

The City describes and summarizes water quality improvement activities annually in its Watershed Urban Runoff Management Program (WURMP) reports required under the old NPDES MS4 Permit (Order Number R9-2007-0001) (SDRWQCB, 2007); the WURMPs describe the implemented nonstructural BMPs. Additional details are in the Mission Bay and La Jolla WURMP (City, 2012a). Water quality improvement activities were also identified in the Comprehensive Load Reduction Plan (CLRP) for the Scripps HA, which was developed in response to the Bacteria TMDL and submitted to the RWQCB in 2012.

Furthermore, the new NPDES MS4 Permit (Order Number R9-2013-0001) (SWRCB, 2013b) requires the development of Water Quality Improvement Plans (WQIPs). The WQIPs are intended to guide responsible parties towards improving water quality in receiving waters. Future water quality improvement goals, strategies, and monitoring and assessment programs will be included in the WQIP for the Mission Bay & La Jolla Watershed, which includes the La Jolla ASBS.

5.1.1 Facility and Construction Site Inspections

Storm water runoff is regulated by multiple types of permits, including NPDES permits, a state-wide Construction Activities Storm Water General Permit, Phase II MS4 Permits, and a state-wide Industrial Activities Storm Water Permit.

Inspections of operations or activities within the ASBS 29 drainage area are an effective way to quickly assess potential impacts on water quality and to correct deficiencies and/or change behaviors. These evaluations increase efficiencies in addressing discharges, correcting behaviors, and abating sources of targeted pollutants at a variety of residential, commercial and industrial areas.

The City requires the following inspection frequencies in accordance with compliance provisions set forth by the General Exception:

- Municipal Facilities: Once prior and once during the rainy season
- Construction Sites: Weekly during the rainy season
- Industrial Facilities: Monthly during the rainy season

- Commercial Facilities: Twice during the rainy season
- Outfalls greater than or equal to 18 inches in diameter: Once prior to the beginning of rainy season (October 1), once during the rainy season, and maintained to remove trash and other anthropogenic debris

The City implements multiple inspection programs, as described in the following subsections.

Treatment Control BMP (TCBMP) Inspection and Maintenance Verification Program

TCBMPs are permanent storm water treatment features incorporated into the design of many newly developed or redeveloped properties and are installed to meet the City's Standard Urban Storm Water Management Plan (SUSMP) (County of San Diego, 2012) requirements. The City is required by its Municipal Code, Section 43.03, to annually verify that TCBMPs on properties within its jurisdiction are effectively operated and maintained via inspection. Owners and operators of these properties are required to conduct regular maintenance activities, per maintenance agreements signed with the City and filed with the County Recorder's Office.

The City's TCBMP program (City, 2013c) has three main components:

- Inventory Maintenance
- An Annual Maintenance Verification Form
- Periodic TCBMP Maintenance Site Inspections

There are currently two TCBMPs in the ASBS 29 drainage area; these are presented in Section 5.2 (Implemented Structural BMPs).

Industrial and Commercial Facilities Inspection Program

The NPDES MS4 Permit requires the City to inventory and inspect industrial and commercial businesses to prevent illegal discharges to the storm drain system. The City implemented an industrial and commercial inspection program to evaluate sites and sources, as well as to inspect businesses and to answer the following management questions:

- What are the target activities and areas during inspections?
- Does the City's industrial and commercial inventory need to be re-evaluated?
- Can specific source types within the inventory be feasibly prioritized based on site-specific characteristics?

Currently, 26 commercial or industrial facilities in the ASBS 29 drainage area are inspected (SWRCB, 2012c).

Construction Inspections

The City issues a construction permit for all new construction, including repair or replacement of existing fixtures. Per the Construction General Permit, dischargers are required to conduct weekly BMP visual inspection and quarterly non-storm water visual inspections at each drainage area for the presence of unauthorized and authorized non-storm water discharges and their sources. Storm-related inspections for qualifying storm events ($\frac{1}{2}$ inch or more) must

include visual inspections of BMPs and observations of storm water discharges at all discharge locations prior to the storm, during the storm (every 24 hours), and after the storm. Inspection and potential sampling requirements could increase based on site risk level, as determined by the site SWPPP.

Dischargers must also inspect after a storm event to:

- Determine whether BMPs were adequately designed, implemented, and effective.
- Identify any additional BMPs necessary.

Municipal Facility Inspection Program

Two self-inspections of municipal facilities and activities are required each year. These inspections determine what practices and policies have been adopted and implemented so that the general effectiveness of instilling practices to reduce pollutants in urban runoff can be assessed. If deficiencies or ineffective procedures are identified, departments must identify and implement corrective action(s). If the department determines that no corrective action(s) can be implemented immediately (such as construction of a structural control), the department must establish a schedule for implementing the corrective action(s).

5.1.2 Trash Management

The General Exception prohibits discharging trash to the ASBS. To comply with this prohibition, the City has multiple measures to minimize trash discharges. These measures promote recycling of solid waste to reduce the amount entering landfills, which complies with the California Integrated Waste Management Act of 1989 (Assembly Bill [AB] 939), and help meet the recycling goals established by the City and mandated by the State of California. Routine trash collection services minimize trash and debris discharges to the ASBS.

The City's trash management measures are:

- Residential Collection of Refuse—Weekly trash service, including collection, transportation, and disposal of residential refuse
- Recycling—Biweekly curbside collection of recyclable materials, now required as part of the City Recycling Ordinance
- Green Material and Yard Waste—Biweekly curbside collection of green material and yard waste, which is used to generate compost, wood chips, and mulch that are available to residents
- Composting—Access by residents to composting resources and education, with a Compost Bin Voucher Program that provides residents a discount on compost bins
- Household Hazardous Wastes—Recycling of residential household hazardous wastes at the City's Household Hazardous Wastes facility

- Environmentally Preferable Purchasing —Use by City departments of products that have a reduced effect on human health and the environment, as much as practical
- The City's Environmental Services Department illegal dumping hotline
- Trash clean-up sponsorships (see WURMP activity sheets for details)

5.1.3 Animal Waste Management

Dogs are restricted at City beaches and bay locations, except for two off-leash "dog beaches." Some general guidelines that apply to dog owners are (City, 2013a):

- Dogs are allowed on beaches from 6:00 p.m. to 9:00 a.m. from April 1 to October 31, and from at 4:00 p.m. to 9:00 a.m. from November 1 to March 31.
- Pet owners must be prepared to pick up after their pets at all areas, leashed or unleashed. It is unlawful to allow a dog (or other pet) to defecate on public property without immediately removing the waste to a proper trash receptacle.

The City also has a Pet Waste Bag Dispenser Program in areas frequented by pet owners. During the two-year pilot study, the number of pet waste bags dispensed was recorded and the effectiveness of the overall program at reducing pollutants was assessed (City, 2012a). Animal waste management is also a large part of the Think Blue campaign, discussed in Section 5.1.8.

5.1.4 MS4 Cleaning

The Transportation and Storm Water Department inspects, maintains, and repairs the MS4, including clearing blocked drains, removing debris from storm drain structures and channels, and cleaning and repairing damaged drainpipes (City, 2013c).

City MS4 cleaning activities include:

- Catch Basin Cleaning—Catch basin cleaning programs provide direct, additional load reduction. The City initiated a Catch Basin Inlet Cleaning Pilot Study to evaluate the performance and operation and maintenance requirements of storm drain insert BMPs at eight locations throughout the City. Details are in the Storm Drain Insert Pilot Study Final Report (City, 2012e).
- Storm Drain Repair and Replacement—Projects include replacement of existing pipes and outfalls and work on existing drainage easements to maintain proper MS4 function.

The San Diego region's weather pattern is typified by a long dry season from roughly May through October. During this time, materials are expected to accumulate within catch basins without mobilization into the MS4. However, this dry season is typically followed by a wet weather season with sporadic but occasionally significant rain events, which can transport materials within those catch basins to the receiving waters. The City conducted two pilot studies assessing the benefits of removing deposited material by direct cleaning or capture by a filter insert. The two studies are summarized below.

A Catch Basin Inlet Cleaning Pilot Study was conducted that characterized the physical dimensions, conditions, and functions of catch basin inlets within the City's drainage network. The City assessed the effectiveness of both manual and Vactor cleaning methods in different land use settings, and characterized the sediments removed, accumulation rates, and pollutants. Catch basins in each network were cleaned four times between December 2011 and March 2012, and one time in September 2012. The results of this study allowed the City to improve management measures by improving the City's information base on catch basin cleaning. The development and implementation of record-keeping protocols for City and contracted crews, throughout this pilot study, has enabled the City to identify those catch basins that may be acting as storage devices within the drainage network. Based on rates of material accumulation in different areas and land use settings, the City was able to identify areas that might benefit from more frequent cleaning and so reduce the incidence of catch basin or storm drain pipe clogging and other maintenance problems. This study also provided information about optimizing catch basin cleaning methods, to capture the most pollutants relative to the level of effort expended.

A Storm Drain Insert Pilot Study was conducted to quantitatively and qualitatively assess the performance of the storm drain insert technologies during both dry and wet weather. Five pilot BMP inserts were selected and installed at project sites from February through April 2011, then monitored from September 2011 through December 2011. Monitoring included pre-maintenance inspections, post-storm inspections, dry weather inspections, and maintenance observations. Maintenance was performed according to the BMP manufacturers' routine procedures. Maintenance procedures and the level of maintenance effort were documented. Each BMP was monitored and assessed for its effectiveness and potential enhancements that might improve pollutant removal efficiency, cost-effectiveness, and identification of those BMPs that would be most cost-effective and efficient in future wide-scale improvement of water quality.

5.1.5 Street Sweeping

Street sweeping uses mechanical and enhanced pavement cleaning practices to minimize transporting pollutants, primarily those associated with sediment (e.g., metals). Street sweeping also helps prevent pipes and outlet structures in storm water detention facilities from becoming clogged with debris and trash. The City sweeps streets regularly for its general road maintenance. Results of an effectiveness monitoring and operational assessment are presented in the Targeted Aggressive Street Sweeping Pilot Study Effectiveness Assessment (City, 2010a). Assessments of effectiveness and program activity summaries for each fiscal year through 2012 are in the Mission Bay and La Jolla WURMP annual report. Under the new NPDES MS4 Permit, future reporting will be provided through the WQIPs.

5.1.6 Sanitary Sewerage Management

In 2001, the City initiated a Sewer Spill Reduction Program, which includes cleaning all 3,000 miles of the municipal sewerage system by 2004; developing a system-wide cleaning schedule; televising and assessing the condition of more than 1,200 miles of the oldest and most problematic sewer lines in the system; and increasing the number of miles of sewer lines that are replaced or rehabilitated from 15 to 45 miles per year. Between 2000 and 2007, the program

reduced the number of spills by 79 percent (City, 2013e). The program's success has also reduced beach closures from sewer spills.

The City has a Sewer Overflow Tracking and Response Plan to ensure that all sanitary sewer overflows are identified, responded to, investigated, and reported promptly and effectively.

The City has developed residential and commercial programs targeted at reducing the introduction of materials that may impede or damage the sewer system. These include:

- Residential Grease Disposal Program—The City provides residents with a cooking oil and grease recycling program at the Miramar Landfill Recycling Center, and with educational materials on how to keep grease out of the drain.
- Food Establishment Wastewater Discharge Program—This program controls the discharge of grease from food establishments into the wastewater collection system and requires a permit to do so; the permitting process ensures that the facilities install the appropriate grease-removal equipment to trap cooking grease before it enters the wastewater system.

5.1.7 Smart Gardening and Water Conservation

The City provides various resources to promote smart gardening and to educate and inspire residents through exhibits and programs featuring water conservation and the sustainable use of related natural resources. It also provides incentives and rebates to encourage water conservation and smart gardening practices such as rebates for smart-irrigation controllers, greywater information, rainwater harvesting rebates, resources for plants for California-friendly landscapes, and other sustainable landscaping resources.

Specifically, these landscaping resources include:

- Vegetated Swales—Biofiltration BMPs reduce runoff velocities, which allows sediment and other pollutants to settle out (SDRWQCB, 2013a). Biofiltration also absorbs nutrients and reduces peak runoff velocities.
- Bioretention Systems (Rain Gardens)—These landscaping features are adapted to treat storm water runoff on-site, and are typically applied to small sites. These facilities function as soil- and plant-based filtration devices that remove pollutants through a variety of physical, biological, and chemical treatment processes.
- Revegetation—Replacing ornamental vegetation with native, drought-resistant vegetation provides soil cover to reduce erosion, water use, and runoff.
- Water Conservation—Programs that include the Residential Rainwater Harvesting Rebate Pilot Program, Residential Water Survey Program, and Water Conservation Rebates and Incentives program aim to conserve water and prevent pollution by reducing runoff entering the storm drain system.

5.1.8 Education and Outreach

The City has multiple approaches to educating its residents, visitors, and industry on ways to prevent pollution and protect local waterways, including Think Blue and Project Stewardship: Water Education for Lifelong Leadership (Project SWELL).

Some elements and examples of implementation of these programs are:

- Think Blue—The City’s pollution prevention education program educates and informs San Diego residents and business owners that it is illegal, and punishable by fines, to allow non-storm water discharges such as debris and other material to enter the storm drain system. Think Blue encourages residents to report problems via the storm water pollution prevention hotline, wherever they may occur.

The City’s Think Blue website is dedicated to educating residents and businesses on storm water pollution prevention and promotes the “3 C’s”: contain, control, and capture. Information on general practices and impacts on water quality are available through pollution prevention guidebooks on the following topics:

- Wash Water and Irrigation Runoff
- Construction Activities
- Trash Storage and Disposal
- Vehicle Maintenance
- Pet Waste Disposal
- Integrated Pest Management
- Landscaping (green waste, pesticide use, erosion prevention)

- Project SWELL—This program is a school-based science curriculum that teaches children about the importance of the region’s waterways. It is administered through a partnership of the City, the San Diego Unified School District, and San Diego Coastkeeper (Coastkeeper). Through classroom presentations, Project SWELL educates students about how to understand and improve the condition of San Diego’s waterways (City, 2013d).
- Partnership with Coastkeeper—The City, in a partnership with Coastkeeper and SIO, developed full color trifold brochures about the La Jolla ASBS with general information on ASBS issues, Marine Protected Areas information, and pollution prevention practices for local businesses and residents. Approximately 2,000 brochures were distributed in 2006 to the community; they continue to be available to the public. (SIO et al., 2008).

At the City’s Kellogg Park, Coastkeeper worked with The Friends of Kellogg Park to develop ASBS content for a permanent lithocrete (crushed glass in concrete) map installed in the concrete boardwalk. The map is an educational tool for the visitors of La Jolla Shores; provides information on the ecological, cultural, and conservation aspects of the area; and raises awareness of the ASBS in an easily accessible manner.

- Publicly Available Data—Historical and current data are available to the public through the Southern California Ocean Observing System, which has user-

friendly interfaces and products (such as Google maps) to display the data interactively.

5.1.9 Management of Pesticides or Other Chemicals

The City's Integrated Pest Management and "Healthy Garden, Healthy Home" program provide resources and educational information on pest control and proper lawn care, to reduce use of pesticides throughout the City. The City encourages native plant use in landscaping to reduce pesticide, fertilizer, and water usage.

The City promotes the following tips to maintain a healthy yard with minimal fertilizers, herbicides, insecticides, or other chemicals:

- Plant grass species that do well in the area.
- When fertilizing, apply no more than 3 to 6 pounds of actual nitrogen per 1,000 square feet per year.
- Routinely inspect and repair sprinkler heads.
- Aerate lawns annually; remove thatch if it exceeds ½ inch.
- Cut only one-third to one-half of grass height at each mowing and keep lawnmower blades sharp.
- Irrigate deeply and infrequently.

The City collaborates with the University of California's Agriculture and Natural Resources Statewide Integrated Pest Management Program (UC IPM). This program provides extensive online resources about home and landscape pests, weeds, and pesticides, and provides online training, events, and workshops on pesticide safety. UC IPM offers interactive tools and models such as weather models to assist in planning and making pest management decisions based on site conditions.

The City also works with the County of San Diego to ensure the safe use of pesticides and promote the use of effective biocontrol measures.

If pesticides must be used, the City offers these tips to reduce pesticide effects on local waterways:

- Choose an insecticide based on the targeted pest, preferably the least toxic option.
- Determine the right amount of pesticide to purchase.
- Never let pesticide runoff flow into storm drains.
- Use spot treatments whenever possible.
- Don't apply pesticides on paved areas.
- Don't apply indoor pesticide to areas that will be washed with water, or where food is prepared or stored.
- Don't overwater after applying outdoor pesticides.
- Don't apply indoor pesticide into or near floor drains or sinks.
- Don't apply pesticides outdoors when rain is forecast or when it is windy.

5.2 Implemented Structural BMPs

This section describes the structural BMPs, including LID measures, which are currently implemented by the City. To control storm water discharge to the MS4 during a design storm², dischargers must first consider using LID practices to infiltrate, use, or evapotranspire storm water runoff on-site.

LID emphasizes conservation and use of on-site natural features to protect water quality. LID can significantly increase the protection of water quality by using engineered, small-scale controls that replicate the pre-development hydrologic regime of watersheds, by infiltrating, storing, evaporating, and detaining runoff close to its source. The City has developed a *LID Design Manual* with guidance for planning, designing, and implementing LID BMPs for street improvement, new public streets, and development and redevelopment of city parks and facilities (City, 2011b). The design manual provides clear guidance to planners, design engineers, plan reviewers, inspectors, and maintenance staff for designing and implementing LID practices and for tailoring design standards and recommendations to the unique climate and geography of the San Diego area.

Structural BMPs are built into the development at the site scale, and large-scale, structural BMPs receive flows from neighborhoods or regions and often serve dual purposes, for flood control and groundwater recharge. These BMPs are often in public spaces and can be co-located in parks or green spaces.

Figure 5-1 is an overview of all implemented structural BMPs in the ASBS 29 drainage, and each structural BMP is described in the subsequent sections (5.2.1 through 5.2.3.)

5.2.1 Low-Flow Diversions

In 1997, storm drain outfalls along the coastline were inventoried and prioritized by their potential for human contact with flow from the drain (e.g., flow crossing the beach). Outfalls were labeled by the street name location, and those with high or medium contact potential were studied to determine the feasibility and cost of diverting low flows to the wastewater collection system.

Low-flow diversions are structures that redirect dry weather urban runoff into the sanitary sewer system, where the runoff then receives the same tertiary-level treatment as sewer water. The City has installed low-flow storm drain diversion systems in phases to serve the coastlines of the La Jolla, Pacific Beach, and Ocean Beach areas. Installation of dry weather flow diversions responds to the General Exception's prohibition of dry weather flows and reduces loading of pollutants through runoff capture and treatment.

² A design storm is a selected storm event of specified size that is used to determine the treatment capability of a BMP based on calculated runoff volumes and peak discharge rates.

The City has five low-flow diversions installed and four under construction within the ASBS 29 drainage area; see Figure 5-1. The locations of installed low-flow diversions are:

- Corner of Spindrift Avenue and Roseland
- Avenida de la Playa and Paseo del Ocaso
- Vallecitos and Camino del Oro
- Along Camino del Oro near La Jolla Shores Drive
- 8555½ El Paseo Grande

The locations of low-flow diversions currently under construction are:

- 7920 Princess Street
- 1624 Torrey Pines Road
- Corner of Torrey Pines Road and Charlotte
- Corner of Camino del Oro and El Paseo

The City will monitor low-flow diversion measures on the downstream side of the diversion to verify zero flow beyond the diversion and into the ASBS.

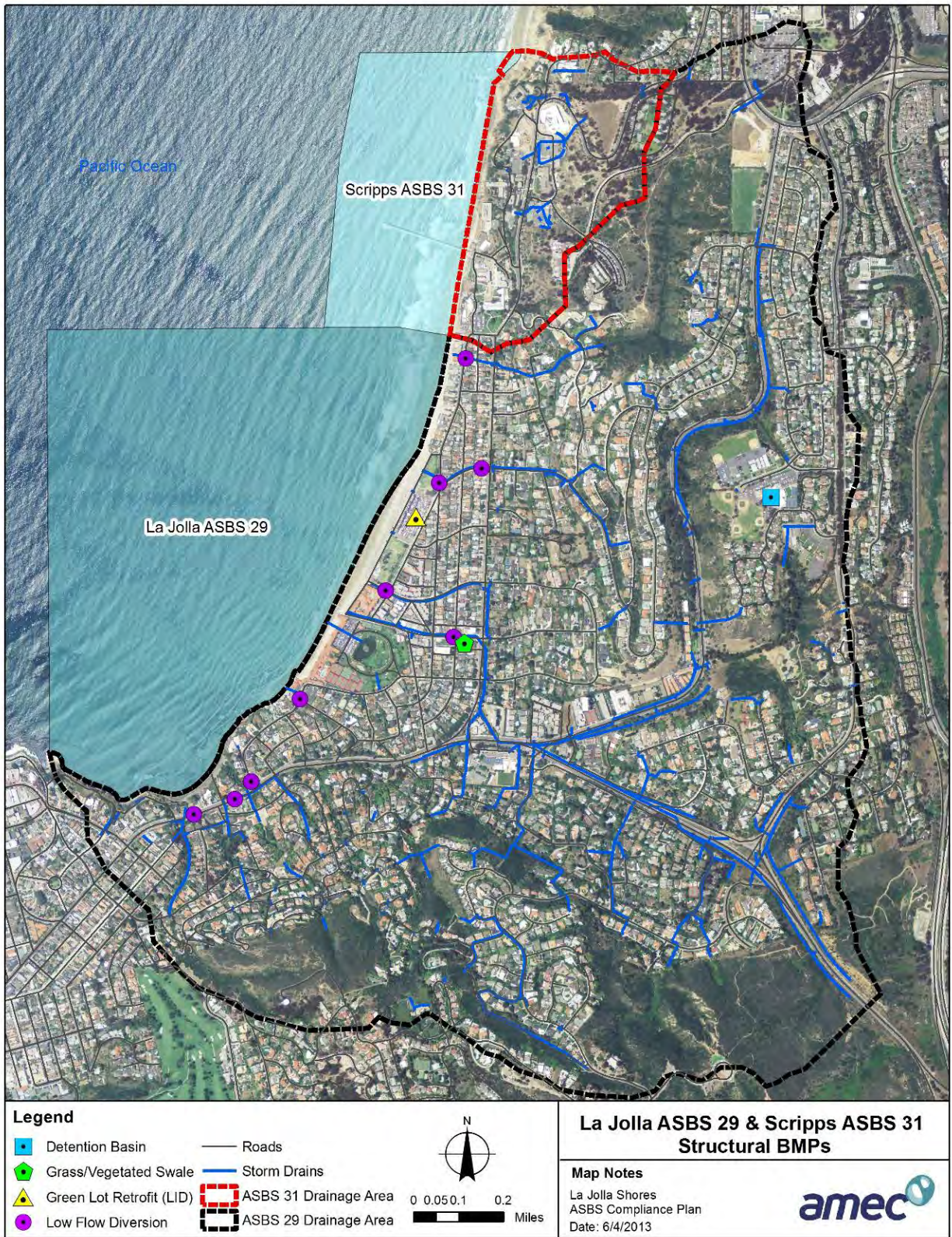


Figure 5-1: Implemented Structural Best Management Practices (BMPs)

5.2.2 LID “Green Lot” Project at Kellogg Park

The LID “Green Lot” retrofit project addresses the problems of urban runoff and pollutant discharges to the ASBS. The project replaced a portion of the conventional asphalt of the Kellogg Park parking lot with porous pavers and other infiltration areas to allow infiltration urban runoff. The northern and southern ends of the parking lot were replaced with porous pavement, and the western perimeter was upgraded with a decomposed granite planter area that runoff can flow into and infiltrate. The parking lot is also planter-bed-landscaped with native, drought-tolerant vegetation.

5.2.3 Treatment Control BMPs

TCBMPs are permanent storm water treatment features that are incorporated into the design of many newly developed or redeveloped properties, and are installed to meet the City’s SUSMP requirements. A vegetated swale is a broad, shallow channel with a dense stand of vegetation covering the side slopes and bottom (USEPA, 1999). They are designed to trap particulate pollutants (suspended solids and trace metals), promote infiltration, and reduce the flow velocity of storm water runoff (USEPA 1999). A detention basin is an area where excess storm water is stored or held temporarily, and then is slowly drained when water levels in the receiving channel or MS4 recede (Project Brays, 2013).

Currently, there are two TCBMPs in the ASBS 29 Drainage Area: a vegetated swale and a detention basin (see Figure 5-1 and Table 5-2).

Table 5-2: Treatment Control BMPs in the ASBS 29 Drainage Area

Project Name and Location	Public or Private?	Number of BMPs by Type	
		Grass or Vegetated Swales	Detention Basin
Scripps Gateway YMCA (32.858215, -117.242709)	Private		1
Villa Starlight (32.853614, -117.254459)	Private	1	

6.0 Planned & Proposed BMPs

The Scripps Watershed CLRP was prepared and submitted to the SDRWQCB in 2012, and updated in 2013. The CLRP was developed as an integrated water quality plan combining multiple permit-based and voluntary strategies and BMPs into a comprehensive approach to complying with the Bacteria TMDL (SDRWQCB, 2010). The CLRP also integrates considerations for addressing regulations for the La Jolla ASBS adjacent to the Scripps Watershed.

The City, as the sole responsible party in the Scripps Watershed (except for UCSD property), will use the CLRP to develop watershed implementation programs, evaluate their effectiveness, and make adjustments over the anticipated 20-year implementation period of the Bacteria TMDL. The prioritization process for implementing BMPs carefully considers many factors, including feasibility, cost-effectiveness, and the potential to reduce pollutant loads. These factors have been considered and analyzed as part of the CLRP development process for each individual management practice. Prioritization allows earlier implementation of the BMPs with the highest feasibility, highest cost-effectiveness, and greatest potential for pollutant load reductions.

Water quality target levels for the General Exception are:

- Table B, Instantaneous Maximum Water Quality Objectives in Chapter II of the Ocean Plan; or
- A 90 percent reduction in pollutant loading during storm events for the City's total discharges.

The CLRP made recommendations regarding nonstructural and structural BMPs for load reduction in the Scripps Watershed, a subset of which are applicable to BMP recommendations for the La Jolla Watershed required by the General Exception. Based on the requirement of the General Exception to cease all dry weather discharges, the currently planned low-flow diversions and numerous nonstructural BMPs are planned to be implemented by the compliance date. BMP implementation beyond current baseline that is planned for fiscal year (FY) 14 and for future years will be based on available funding through annual budget requests. As available funding allows, the City will continue to implement BMPs to achieve the requirements set forth in the General Exception.

6.1 Planned Nonstructural BMPs for Fiscal Year 2014

Nonstructural BMPs are intended to reduce pollutant loads before they enter the storm drain system. Nonstructural BMPs for the La Jolla Watershed were identified in the 2013 Scripps CLRP Update as potential expansions of existing BMPs to reach a greater geographic area or to achieve greater impact in the program's existing geographic area; potential enhancements or changes to existing programs that could achieve greater load reduction; or new or expanded initiatives to address pollutant sources and load reduction goals.

The nonstructural BMPs planned for implementation in FY 14 are additions or enhancements beyond the current baseline level of BMPs. These BMPs have been funded in the City's FY 14

budget and as of the writing of this report are either being implemented or are in various stages of planning and development to begin implementation before the end of the fiscal year. Planned BMPs are summarized below and described in Sections 6.1.1 through 6.1.9.

- Enhance LID implementation through zoning amendments.
- Conduct property- and pollutant-generating activities (PGA)-based inspections.
- Update minimum BMPs:
 - Sweeping of private roads and parking lots
- Conduct community-based trash clean-ups.
- Enhance education and outreach.
- Expand residential BMP rebate programs:
 - Rain barrels
 - Irrigation control (turf conversion)
- Enhance street sweeping.
- Initiate median sweeping.

6.1.1 Enhance LID Implementation for New Development and Redevelopment through Zoning Amendments

The SUSMP and zoning ordinances outline low-impact development (LID) requirements, which primarily detain and filter runoff using natural filters; however, storm water retention for reuse may also be desired. In some cases, existing City zoning codes and policies create barriers to LID implementation. Therefore, the City's Storm Water Division commissioned an audit in 2013 of City codes, ordinances, and policies to identify opportunities to facilitate using LID storm water management measures. The audit identified and prioritized the opportunities in storm water LID site planning and design implementation, which will be used to amend the City's policies and codes in FY 14. Amending these policies and codes enhances LID implementation for both new development and redevelopment by amending zoning, which is expected to provide greater pollutant source control.

Updating City development codes is a multi-year process that began with a pilot study that assessed LID implementation opportunities. The study results are in a final Technical Memorandum (City, 2013f). This pilot study assessed City development codes and how they directly or indirectly impact LID implementation, and recommends revising identified codes to facilitate LID implementation. The next step is to proceed with the City's discretionary review process to codify the accepted recommended changes.

Planned steps in FY 14 for the City process is anticipated to take between 6–12 months and consist of gathering input from the following City and stakeholder groups:

- Code Monitoring Team
- Technical Advisory Committee
- Community Planners Committee
- Planning Commission
- City Council (final City approval)

Once the City process is complete, the California Coastal Commission will review the proposed code change, which is anticipated to take an additional 15–18 months.

6.1.2 Design and Implement Property- and PGA-Based Inspections and Accelerated Enforcement

The City is evaluating and recommending changes to its inspection program, to focus on those land uses, PGAs, and high-priority areas that are most likely to be contributing to loading, and where the greatest supplemental load reductions from inspection and enforcement are likely to be achieved.

A major load reduction opportunity is to include property-based inspections in addition to the traditional business (industrial and commercial) inspection program in the Permit. This strategy enables the City to focus on multi-tenant buildings and properties, sources most likely to lead to bacteria and trash loading. Property-based inspections are an important inspection strategy because trash, landscape, and parking areas are most often managed by a property management company or contractor, rather than by an individual business. Adding property-based inspections provides significant opportunities to increase the effectiveness and reach of the City's ongoing conservation strategies, related to outreach and education, enforcement, inspection, and landscape and water.

The City has incorporated the new property-based inspection protocols into its industrial and commercial inspection program and is currently conducting property-based inspections citywide.

6.1.3 Update Minimum BMPs for Existing Residential, Commercial & Industrial Development & Enforcement

This BMP is a catch-all category for updating required minimum measures as standards in the MS4 Permit change. The City is updating the minimum BMPs and prohibitions for residential, commercial and industrial uses. The new BMPs will be in place over the next two years.

6.1.4 Conduct Trash Clean-Ups through Community-Based Organizations Involving Target Audiences

The City plans to increase the effectiveness and reach of its current trash clean-up sponsorships by engaging community groups to define and carry out more community-based trash clean-ups, beginning in FY 14. Partnerships with "I Love a Clean San Diego" and others have been longstanding programs in the La Jolla Watershed that will continue and be enhanced. In addition, to target clean-up more effectively and with a longer impact and reach in the affected communities, the City intends to explore greater partnership opportunities with community organizations that can strongly engage with targeted audiences and communities.

6.1.5 Enhance Education and Outreach Based on Results of Effectiveness Survey And Changing Regulatory Requirements

As part of its update to its minimum BMPs, the City will distribute information regarding them through the public information processes of the City's Development Services Department. This will include descriptive information about BMPs and LID, which will be available to anyone seeking to obtain development permits or information about development opportunities in the City. In addition, the Storm Water Division will actively distribute fact sheets about BMP requirements as part of its code compliance and inspection functions. This information will also be made available on the Division's Website and to other outlets as communication needs are refined.

6.1.6 Expand Residential BMP Rebate Programs to Multi-Family Housing In Target Areas

The City's Public Utilities Department currently operates a Residential Outdoor Water Conservation Rebates Program to reduce outdoor water use and minimize the amount of polluted dry weather runoff that enters the City's MS4. This program has multiple components, two of which are described below. To address the ASBS Special Protections, the City plans to expand this program to reach more targeted areas beginning in FY 14 by issuing more rebates.

Residential BMP Program: Rain Barrels

The City Public Utilities Department currently operates a rebate program for rainwater harvesting practices (described in Section 5), including using rain barrels and cistern-type devices. However, implementation of the program has been relatively limited. Beginning in FY 14, the City plans to increase the number of installed rain barrels by issuing more rebates and increase the amount of roof runoff that is intercepted, which in turn decreases runoff volumes (and associated pollutant loads).

Residential BMP Program: Irrigation Control (Turf Conversion)

Dry-weather flows from over-irrigation can contribute to pollutant loads. This program promotes the reduction of dry weather flows by providing incentives to reduce over-irrigation and to convert existing landscapes to less water-intensive landscapes (i.e., xeriscapes). Some of the many options in program development and implementation are pilot projects, education and outreach, and prohibitions on overwatering and increased enforcement of them. As with the rain barrel rebate program, the City plans to increase the amount of turf removed and replaced with water-wise landscaping by issuing more rebates, beginning in FY 14.

6.1.7 Enhance Street Sweeping through Equipment Replacement and Route Optimization

Improved street and median sweeping technology has been shown to reduce wet weather pollutant loads for bacteria, metals, non-metal toxics, and nutrients (City, 2012c). Increasing the sweeping frequency, increasing the area of impervious cover swept, and upgrading sweeping equipment could potentially increase pollutant load removal.

The City plans to replace existing mechanical broom street sweeping equipment with high-efficiency, regenerative air- and vacuum-assisted sweepers, which is expected to further reduce pollutant load, even if current sweeping routes and intervals remain the same. Beginning in FY 14, the City will convert some of its routes in the ASBS drainage from mechanical to vacuum sweeping.

6.1.8 Initiate Sweeping of Medians on High-Volume Arterial Roadways

The City of San Diego's Median Sweeping Study, Phase III (City of San Diego, 2009) found substantial pollutant concentrations in materials removed from medians (notably metals). Based on these findings, the City plans to begin bimonthly sweeping of selected median areas in the ASBS drainage in FY 14.

6.2 Proposed Future Nonstructural and Structural BMPs

The 2013 Update to the Scripps CLRP identifies the need for nonstructural and structural BMPs above the City's current level of effort to reduce pollutant loads enough to meet the special conditions of the General Exception. As discussed in Section 6.1, the City has committed to implementing or enhancing a number of nonstructural BMPs in FY 14. Future nonstructural and structural BMP implementation will be based on available funding and subject to modifications based on best available science and program assessments.

These BMPs and their associated costs are shown in Appendix B to the Scripps CLRP Update (City, 2013b).

6.2.1 Nonstructural BMPs

The General Exception requires the implementation of all nonstructural BMPs necessary to meet the special conditions by September 20, 2013 or an alternate schedule proposed for when the BMPs will be in place. In order to secure the necessary resources and funding, the City plans to phase in the implementation of the following nonstructural BMPs from the 2013 CLRP Update over the next four years, beginning in FY 15 and ending in FY 18:

- Train staff in the Development Services Department on LID regulatory changes and the *LID Design Manual*.
- Develop regional training for, and focus locally on, enforcement of water-use regulations pertaining to water-using mobile businesses.
- For trash areas, require a full, four-sided covered enclosure, sited away from storm drains; consider requiring retrofitting.
- Enhance inspection of:
 - Animal-related facilities,
 - Nurseries and garden centers, and
 - Auto-related uses.
- Support partnership efforts by social service providers to provide sanitation and trash management for persons experiencing homelessness.

- Develop pilot project to identify and carry out disconnecting developed site impervious surfaces (e.g., building roofs, parking lots) from the MS4 in targeted areas.
- Continue to participate in source reduction initiatives.
- Develop an outreach and training program for property managers responsible for home owners' associations (HOAs) and maintenance districts.
- Expand outreach to HOAs regarding landscape-based rebate programs for common lands.
- Improve the consistency and content of City Websites to highlight enforceable conditions and reporting methods.
- Proactively monitor for erosion, complete minor repairs, and slope stabilization.
- Increase identification and enforcement of actionable erosion and slope stabilization issues on private property, and require stabilization and repair.
- Identify sewer leaks and prioritize areas for replacing sewer pipe.
- Implement a residential BMP Rebate Program for downspout disconnections.
- Require sweeping of private roads and parking lots in targeted areas.
- Optimize catch basin cleanings to maximize pollutant removal.

6.2.2 Structural BMPs

According to the General Exception, structural BMPs necessary to meet the special conditions must be operational by September 20, 2018 or an alternate schedule proposed for when the BMPs will be in place. Similar to its approach with nonstructural BMPs, the City plans to phase in the implementation of the following structural BMPs from the 2013 CLRP Update over an approximate 10-year period, beginning in 2019 and ending in 2027, in order to secure the necessary resources and funding:

- 2.7 acres of Centralized BMPs on public land:
 - Candidate sites: Pacific Beach Elementary, La Jolla Community Park, Bird Rock Park, and Kellogg Park*

These four projects are anticipated to be operational at a pace of one project per year beginning in 2019 and ending in 2022.

- Distributed BMPs on public land:
 - 0.8 acres of bioretention
 - 0.2 acres of permeable pavement

For planning purposes, new identified distributed BMPs will be operational (approximately 10 percent of the needed acreage per year) over an anticipated implementation period of 10 years, beginning in 2019 and ending by 2027.

- Green streets:
 - 1.23 acres of bioretention
 - 0.06 acres of permeable pavement

For planning purposes, green streets will be operational (approximately 10 percent of the needed acreage per year) over an anticipated implementation period of 10 years, beginning in 2019 and ending by 2027.

*Note that Kellogg Park has been identified as a potential area for additional centralized BMPs on public land, beyond the existing parking lot BMP described in Section 5.2.2.

7.0 Discharge Requirements for Parks and Recreation Facilities

The General Exception requires the City to address storm water runoff from parks and recreation facilities, and to identify all pollutant sources (including sediment sources) that may cause waste to enter storm water runoff. BMPs to control soil erosion, prevent pesticide discharges, carry out public education and outreach, control trash, and reduce runoff from parking are included.

The City's Park and Recreation Department oversees nearly 40,000 acres of developed and undeveloped open space and more than 340 parks (City, 2013a). Five of these parks are located in the ASBS drainage area (Figure 7-1).

This section discusses specific BMPs that are applicable to the parks (as identified and described in Section 2.3):

- Kellogg Park and La Jolla Shores Beach Park (two adjacent parks discussed as one because of overlapped usage)
- Cliffridge Park
- Laureate Mini-Park
- Allen Field

Potential sources of pollutants are identified and discussed in subsequent sections.

7.1 La Jolla Shores Small Vessel Boat Launch

La Jolla Shores has the only beach access to the ocean within City limits that allows people to launch kayaks, rafts, etc. It is located on the 2000 Block of Avenida de la Playa, four blocks west of La Jolla Shores Drive and approximately 300 yards south of the lifeguard station. Access consists of a break (of about 35 feet) in the seawall, which permits vehicles to drive onto the beach to unload and load small vessels from vehicles close to the surf. Storm water discharges from impervious surfaces on the land side of the sea wall consist of sheet flow to the beach.

This is an unimproved boat launch, and vehicles are allowed to drive on the sand only in a very limited area and no faster than 5 miles per hour. There is no launch ramp at this location and trailered boats cannot be launched by backing into water, as at traditional boat launch ramps. Given these conditions, this area was determined to not be considered as a Waterfront and Marine Operations area, as described in Section III of the General Exception.

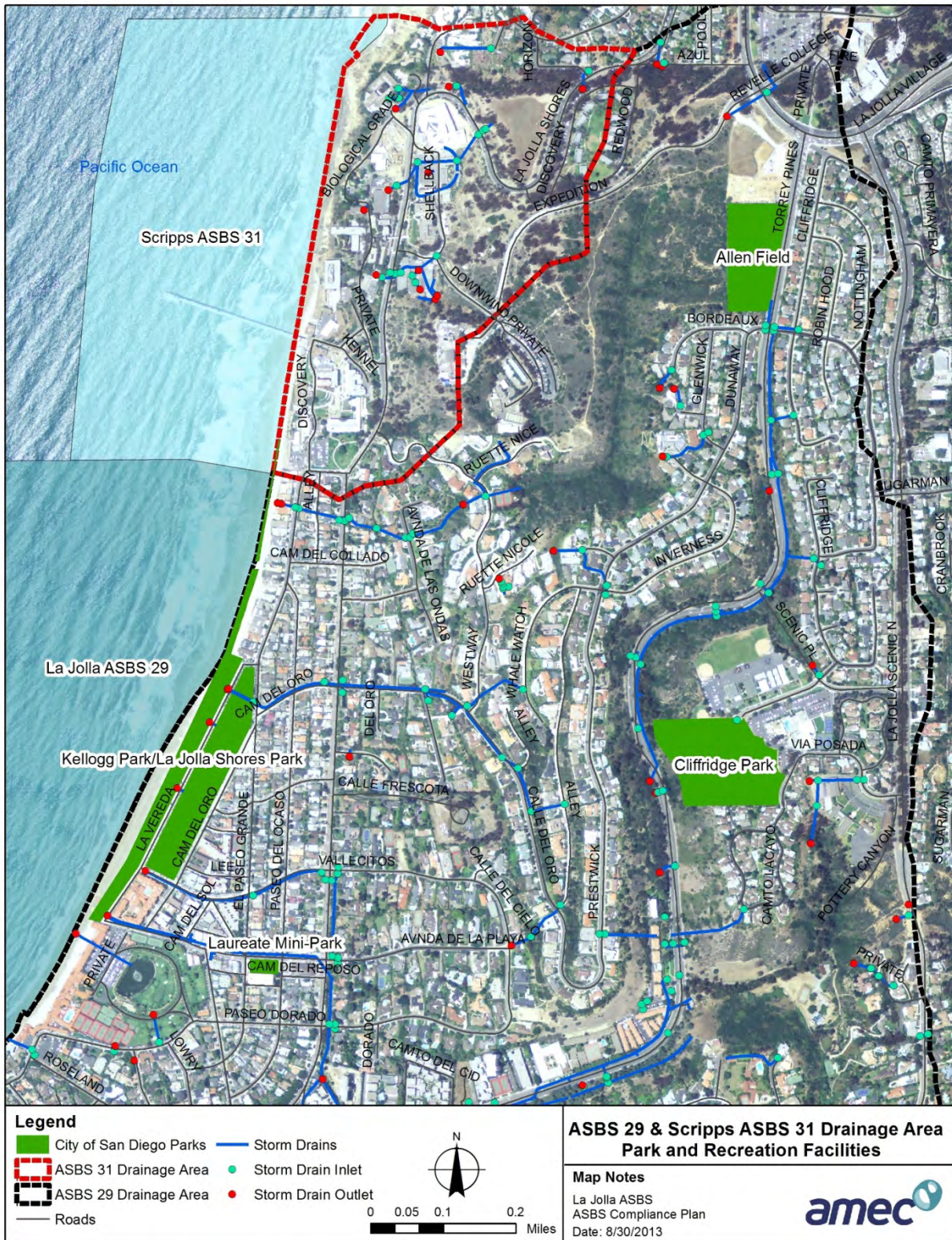


Figure 7-1: Park and Recreation Facilities Within ASBS Drainage Area

7.2 Trash Cans

The City provides numerous trash receptacles to properly manage trash management and so reduce the amount of trash that could enter the ASBS.

An overview of the trash cans at the parks in the ASBS drainage area, as provided by the City Parks and Recreation District Manager (Daneri, May 22, 2013), is presented below.

- Kellogg Park and La Jolla Shores Beach Park have 91 waste receptacles:
 - Eight solar trash compactors (which are emptied as needed)
 - Thirty-six covered trash cans (in the park), 24 around the southern grassy area and 12 in the northern grassy area and picnicking areas, all of which are emptied daily
 - Forty-one uncovered trash cans (placed on the beach sand) which are emptied daily in the summer (Memorial Day through Labor Day) and three times a week during the rest of the year
 - Six covered dumpsters (at the northeastern end of the Kellogg Park parking lot)
- Cliffridge Park has 18 waste receptacles:
 - Nine covered trash cans (six around the picnic tables and three dispersed in other high-use areas, all of which are emptied daily)
 - Eight uncovered trash cans (two around the picnic tables and six dispersed in other high-use areas, all of which are emptied daily)
 - One covered dumpster
- Laureate Mini Park has no trash cans.
- Allen Field has 10 waste receptacles:
 - Nine covered trash cans (in its three soccer fields)
 - One covered dumpster
 - Trash maintenance is conducted by La Jolla Youth, Inc.

In addition, during major holidays or planned events, the City places temporary trash and recycle receptacles on beaches to help dispose of the increased volume of trash (San Diego Clean Beach Coalition, 2012).

7.3 Road and Parking Lots

Impervious surfaces in urban landscapes increase runoff volume and contribute pollutants. Roadways and parking lots collect pollutants from tailpipe emissions and brake linings, whose associated pollutants include copper, lead, zinc, and polycyclic aromatic hydrocarbons (PAHs) (City, 2010b).

Parking lots and roadways associated with the parks in the ASBS watershed are:

- Kellogg Park has a parking lot available to the public from 4:00 a.m. to 10:00 p.m. (City, 2013a).
- Cliffridge Park has no City-maintained parking lots or roads; public parking is available on the neighboring City streets.
- Laureate Mini Park has no parking lots, but City street parking is available.
- Allen Field has a small one-way parking lot accessible from Torrey Pines Road; parking on the adjacent grass and dirt areas is at the owner's risk and is subject to ticketing; the lot is not a high-use roadway and so is limited as a potential source of pollutants.

At Kellogg Park, the park with the highest visitation, the City has implemented the Kellogg Park Green Lot Retrofit Project (discussed in Section 6) to allow infiltration of urban runoff by replacing conventional asphalt in the parking lot with porous pavement. The porous pavement addresses potential water quality problems by reducing and treating runoff flows and discharges to the ASBS via infiltration and retention.

7.4 Picnicking Areas

Picnic areas are often sources of litter. Waste generated from recreational picnic area use (such as carelessly discarded trash, paper wrappers, and plastic bottles) has the potential to enter the MS4 and ASBS.

Picnicking facilities are available at Kellogg Park/La Jolla Shores Beach Park and Cliffridge Park.

- Kellogg Park and La Jolla Shores Beach Park has 19 picnic tables and 7 barbecue grills in the north end of the park. The picnic areas are well maintained and have covered trash cans and hot coal receptacles. Other amenities are 37 benches along the boardwalk facing the beach, seven fire pits on the beach, two restroom facilities, four sinks, nine showers, and three water fountains.
- Cliffridge Park has five picnic tables and three benches. There is a food concession area on the north end of the park, where four of the tables are located along with covered trash cans close by. The fifth table is in the grassy area and has a covered trash can on each end of the table (see Figure 7-2).

- Laureate Mini Park has no picnicking facilities.
- Allen Field has no picnicking facilities, but it has five benches and one three-tiered set of bleachers for spectators.

Providing maintained picnic areas reduces “spillover,” caused by visitors taking food, trash, and decorations (e.g., balloons) into more sensitive beach areas. Picnic areas provide designated areas for cooking and are near receptacles for trash and hot coals. Signs encouraging users to maintain clean picnic areas are posted.



Figure 7-2: Picnicking Area at Cliffridge Park

7.5 Soil Erosion

Open space and park areas have the potential to deliver sediment into the MS4 and/or ASBS. Unpaved areas, non-vegetated areas, and parking lots are potential non-point sediment sources.

Potential soil erosion and sediment delivery from park and recreation facilities in the ASBS drainage area are discussed below.

- Kellogg Park has a low potential to contribute sediment to the ASBS because it consists of two well-established grassy areas, a concrete boardwalk and walkways, a developed parking lot, and a sand playground. In addition, the City has implemented the Kellogg Park Green Lot Retrofit Project to allow infiltration of urban runoff and reduce sediment from being discharged to the ASBS from the parking lot.

- Cliffridge Park has a low potential to contribute sediment, as most of the park is grass sports fields and its landscaped areas are generally within curbing or are vegetated and mulched.
- Laureate Mini-Park has a contiguous grassy area without exposed soil, resulting in a very low potential for soil erosion.
- Allen Field has a low potential to contribute sediment to the ASBS, as most of it is well-established grass fields. However, the adjacent parking lot is a potential sediment source, because street dirt accumulates on roads and parking lots and has the potential to run off in response to precipitation.

7.6 Parks and Recreation BMPs

Nonstructural BMPs applicable to this Parks and Recreation facilities previously discussed are:

- Erosion control measures (Section 4)
- Education and outreach (Section 5)
- Trash management (Section 5)
- Street sweeping (Section 5)
- Pesticide use management (Section 5)

Structural BMPs used at these facilities are discussed in Sections 5; they include:

- Kellogg Park porous pavement retrofit (Section 5)
- Low-flow diversion at Avenida de La Playa (Section 5)

7.7 Public Signage and Notifications

Signs or other appropriate measures are placed throughout the parks, beaches, and visitor centers that inform and educate the public of any applicable requirements of the General Exception and identify ASBS boundaries.

7.7.1 Posted Requirements

City of San Diego regulation signs are placed at beaches, cliffs, walkways, park areas, and adjacent parking lots that prohibit alcohol use, glass containers, smoking, littering, disturbing noises, and overnight sleeping, camping, or parking. These regulation signs also explain restrictions on beach fires and dogs.

At Kellogg Park, 22 regulations are posted at the corners of the park with access to the grassy park areas, picnic areas, and all but one beach entrance behind Lifeguard Tower 32. The regulations are also posted at the small vessel boat launch at the end of Avenida de La Playa. Additionally, “No Littering” and “Clean Up after your Pet” signs are posted at Cliffridge Park. All organized activities at Allen Field must be coordinated through La Jolla Youth, Inc., which conveys, along with signage at the park, all prohibition of litter to users. Dogs are prohibited at Allen Field.

7.7.2 Posted ASBS Boundaries

A large lithocrete map depicting the coastal waters of the ASBS is featured at Kellogg Park/La Jolla Shores Beach Park, between the playground and the bathrooms, at the southern end of the park. It depicts the intertidal, nearshore, and offshore species of the ASBS, as well as ASBS boundaries, coastal geologic features, and geographic coordinates of the area, all scaled for pedestrian access.

Species found in the ASBS are represented on the lithocrete map by their physical features, as shown in Figure 7-3, and are numbered to correspond with actual photographs on a photograph board near the water fountains at the restroom facilities. This numbering system is also used within the children’s play structure to promote further ASBS education.



Figure 7-3: Portion of the Lithocrete Map at La Jolla Shores

Preservation of the marine environment is encouraged through placards within and around the lithocrete map that informs visitors of locations of the preserves and that “nothing may be disturbed or taken without a permit; plant and invertebrate, water quality, archeological and cultural resources protected by law.”

The southern end of the Kellogg Park has a children's playground with swings and a play structure in the sand. The structure incorporates aspects of environmental education and stewardship of the ASBS, and also teaches ocean safety with interactive informational displays of the ASBS and local marine life.

At the La Jolla Shores Small Vessel Boat Launch (see Section 7.1), signs provide notice of the La Jolla Underwater Park-State Marine Conservation Area and the state restrictions for the area.

The lifeguard station at La Jolla Shores Beach has a large sign posted on the eastern wall describing in detail the San Diego-La Jolla Underwater Park and a map showing the ASBS boundaries (Figure 7-4).



Figure 7-4: Sign Posted at La Jolla Shores Beach Lifeguard Station

8.0 Compliance and BMP Implementation Schedule

8.1 Required Reporting of Water Quality Exceedances

If the results of receiving water monitoring (described in Section IV.B of the General Exception) indicate that wet weather discharges that include storm water are causing or contributing to an alteration of natural water quality in the ASBS, the City shall submit a report to the RWQCB within 30 days of receiving the analytical results. (See Figure 8-1 for determining compliance.)

The report must identify the constituents in storm water that alter natural water quality and the potential sources of those constituents. The report must describe BMPs that are currently being implemented, BMPs that are identified in the ASBS Compliance Plan for future implementation, and any additional BMPs that may be added to the ASBS Compliance Plan to address the alteration of natural water quality. Further, the report must include a new or modified implementation schedule.

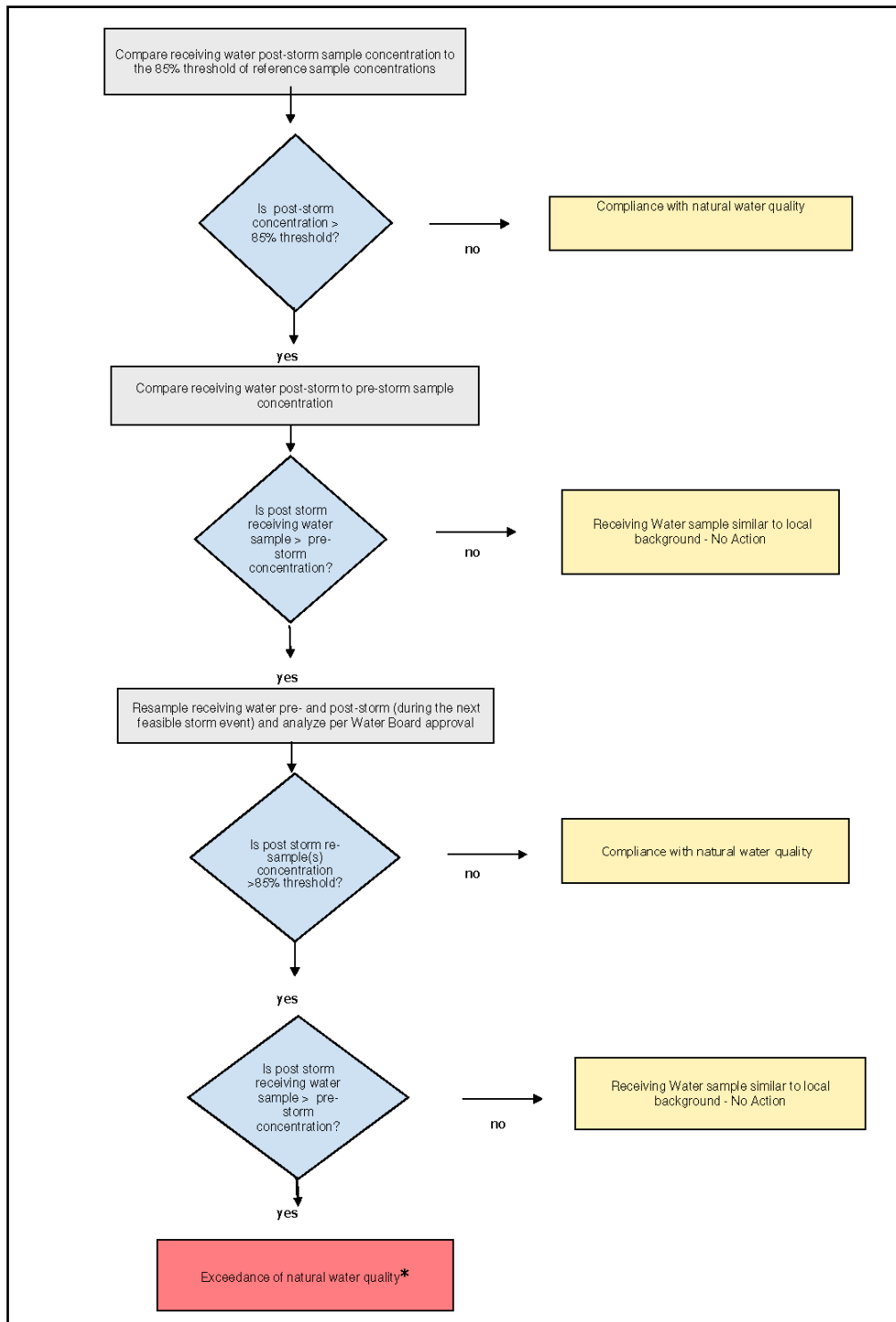
Within 30 days of approval of the report by the RWQCB, the City must revise its ASBS Compliance Plan to incorporate any new or modified BMPs that have been or will be implemented, the implementation schedule, and any additional monitoring required. Nonstructural BMPs must be implemented within one year of the approval (by the State or Regional Board) of the revised ASBS Compliance Plan. Structural BMPs must be implemented as soon as practicable.

As long as the City has complied with the procedures described above and is implementing the revised ASBS Compliance Plan, the City is not required to repeat the same reporting procedure for continuing or recurring exceedances of natural ocean water quality conditions that are due to the same constituent.

8.2 Modifications to This Document

The ASBS Compliance Plan is a dynamic document that may be edited or updated as needed. Any updates, alterations, modifications, or amendments to the document must be submitted to the RWQCB for its approval. The plan will be modified when changes occur that directly affect the purpose (Section 1.2), receiving water quality conditions (Section 8.1), or activities of this Draft ASBS Compliance Plan.

This section provides the procedure for notifying the RCWQB of any technical changes that the City seeks to make and for seeking a formal modification. This section is not intended to be an exhaustive review of all aspects of modification, but is intended to provide a basis for updating or modifying this plan in a manner that recognizes the plan's objective of protecting natural water quality in ASBS 29. A modification is intended to be an efficient mechanism for notifying the RCWQB of a proposed change and for providing data to support the modification.



*Note: When an exceedance of natural water quality occurs, the discharger must comply with Section I.A.2.h (for permitted storm water) or Section I.B.2.C (for non-point sources). Note that, when sampling data are available, end-of-pipe effluent concentrations will be considered by the Water Boards in making this determination.

Source: General Exception, Attachment 1

Figure 8-1: Flowchart To Determine Compliance with Natural Water Quality

A proposed modification shall include:

- A narrative justification with a detailed description of all changes and the reasons they are necessary
- A form that includes, at a minimum: a summary of or an excerpt of the modified text and information, and the previous text and information, with its location in the document

With the narrative justification, the City shall:

- Submit a cover letter on the agency's letterhead, signed by a City representative.
- Address the changes.
- Discuss and justify the necessity for the change(s).
- Identify and explain how the implications of the modification will affect components of the ASBS Compliance Plan.

The City must submit one signed original copy of the modification documents to the Regional Water Board Executive Order to maintain its compliance status.

8.2.1 Nonsubstantive Revisions

Nonsubstantive revisions are changes that do not affect the purpose of the ASBS Compliance Plan, but relate to matters addressed in the requirements of Section 1.A.2 of the General Exception.

Examples of such nonsubstantive changes include, but are not limited to:

- Typographical errors in the ASBS Compliance Plan or underlying documentation
- Department change of name, where there is no change in ownership or responsibility

The City shall give the RCWQB notice of such nonsubstantive changes promptly in writing, or whenever the need for a typographical change is recognized. An addendum sheet to the document shall summarize all updates to the ASBS Compliance Plan and shall be provided to the RCWQB. Although nonsubstantive revisions do not require approval of the RCWQB, it may reply, indicating agreement or disagreement that the change is nonsubstantive. All nonsubstantive modifications will be included as part of the modification summary for the next following formal modification.

8.2.2 Modification for Alteration of Natural Water Quality and Non-Storm Water Flows

As discussed in Section 8.1, monitoring results indicating that wet weather causes or contributes to an alteration of natural water quality shall be reported to the RCWQB within 30 days. Within 30 days of approval of the report by the RCWQB, the City shall revise its ASBS Compliance Plan as described in Section 8.1.

If applicable, the revised ASBS Compliance Plan shall describe the measures by which non-storm water discharges will be eliminated and any interim measures that will be employed to reduce non-storm water flows until the final measures have been implemented.

8.3 Implementation and Compliance Schedule

Based on data collected under the Bight '08 and Bight '13 Regional Monitoring Surveys and analysis provided in the CLRP (discussed in Section 6.0), the City must implement nonstructural and structural BMPs to comply with the General Exception requirement to protect natural water quality. Low-flow diversions that are currently installed or under construction are intended to eliminate non-storm water discharges to the ASBS. The low-flow diversions currently under construction are planned for completion in November 2013. The City plans to implement BMPs in FY 14 that are above current baseline (Section 6.1) and phase implementation of additional nonstructural BMPs between FY 15 and FY 18 (Section 6.2), as fiscal year budgets allow. Structural BMPs will be phased in over an approximate ten-year period between 2019 through 2027. The implementation schedule deadlines for the City, in accordance with the General Exception, are as follows:

- **March 20, 2012:**
 - Non-authorized discharges to ASBS 29 are effectively prohibited.
- **September 20, 2013:**
 - The City shall submit a Draft ASBS Compliance Plan for ASBS 29 to the SWRCB Executive Director or the SDRWQCB Executive Officer.
 - Nonstructural controls shall be implemented.
- **September 20, 2014:**
 - The City shall submit the Final ASBS Compliance Plan for ASBS 29 with a schedule for structural controls based on the results of monitoring runoff and receiving water.
- **September 2013—March 2018:**
 - Phase in implementation of structural and nonstructural BMPs, based on the availability of funding each fiscal year.

- **March 20, 2018:**
 - Structural and nonstructural controls shall be operational, making outfall discharges meet General Exception requirements.
 - Dischargers must comply with the requirement that their discharges into the affected ASBS maintain natural ocean water quality (within the 85th percentile threshold of reference water quality data and pre-storm levels). If results exceed, see flowchart in Figure 8-1 for appropriate actions.

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