Exhibit G

Area of Special Biological Significance 24
Draft Compliance Plan For
The County of Los Angeles and City of Malibu

Submitted to:

State Water Resources Control Board
Division of Water Quality
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Wet weather monitoring was performed by LACDPW at two receiving water locations: 1) S01, located off Zuma Beach directly out from ASBS-016, a 60-inch storm drain; and 2) S02, located off Escondido Beach directly out from ASBS-028, a 36-inch storm drain. The City performed monitoring at receiving water Site 24-BB-03R. For safety reasons this site was only sampled once. Therefore, the assessment of compliance with natural water quality was primarily performed for receiving water station S02, which had samples collected during three wet weather events. Receiving water station S02 is associated with ASBS-028, which is a 36-inch outfall that drains a mixture of developed and vacant land. Receiving water station S02 is considered to be representative of the typical to worst case scenario of the potential impact that storm water runoff may have on the water quality within the ASBS. The receiving water quality assessment is presented in Section 4.0, and a summary of the assessment is presented below.

In samples collected in the receiving water (Site S02), selenium, mercury, and total polynuclear aromatic hydrocarbons (PAHs) concentrations were above the 85th percentile reference threshold and had post-storm concentrations that exceeded those of the pre-storm samples collected during two consecutive monitored storm events. Based on the guidance found in Attachment 1 of the General Exception, this indicates an exceedance of natural water quality in the ASBS for these constituents.

Receiving water samples collected (Site S02) during one event, but not in subsequent events, that had concentrations above both the 85th percentile threshold and pre-storm concentrations include pyrethroids, nitrate as N, copper, lead, and zinc. These constituents do not meet the guidance criteria and are not considered an exceedance of the natural water quality in the ASBS.

During the three monitored events flow from ASBS-016 only reach the receiving water once at Site S01 and thus, receiving water chemistry data was only obtained once at S01 as part of the General Exception monitoring. Mercury, silver, zinc, and total PAHs concentrations in the receiving water were greater than both the 85th percentile threshold and pre-storm concentrations for Site S01. Receiving water concentrations above both the 85th percentile thresholds and pre-storm concentrations occurring during only one event is not considered to be an exceedance of natural water quality.

Pre-storm and post-storm samples were collected and analyzed at Site 24-BB-03R for only one event. The selenium concentration in the receiving water was greater than both the 85th percentile threshold and pre-storm concentrations (see Table 4-3). The concentration of selenium being above the 85th percentile threshold and pre-storm concentrations in one event is not considered an exceedance of natural water quality at Site 24-BB-03R. However, the selenium result at Site 24-BB-03R is consistent with the results at Site S02 where selenium is considered to be an exceedance of natural water quality based on first and second event results.

Pollution Loading Reduction Assessment

The General Exception states that the ASBS Compliance Plan shall describe how the necessary pollutant reductions in storm water runoff will be achieved through prioritization of outfalls and implementation of BMPs to achieve end-of-pipe pollutant concentrations targets during a design storm to below either the Table 1 Instantaneous Maximum Water Quality Objectives (WQOs) in Chapter II of the Ocean Plan or a 90% reduction in pollutant loading during storm events for the applicant's total discharge. Constituents that are currently in exceedance of the natural water

3.2.4 Dry Weather Monitoring

3.2.4.1 City of Malibu ASBS Focused Outreach Program

As part of the City of Malibu ASBS Focused Outreach Program the ASBS 24 was regularly patrolled by the CPS who looked for dry-weather runoff and other pollution threats in the coastal and inland areas. The CPS was funded by a Proposition 84 grant that continued through July 2014. Even though the grant-funded outreach project that included the CPS is complete, the City recently added a new position which will assume the outreach and inspections duties previously performed by the CPS. When individual properties are identified as being out of compliance with the Special Provisions and City policies, such as through over-irrigation, they are mailed educational materials and a cease-and-desist letter (see Section 3.2.3.1). Each of these property owners were personally engaged to correct the issue by providing education on the potential impact to the ASBS and tailoring solutions (e.g., water conservation techniques, available rebate programs) to the property. There were eighty-three illicit discharge cases over the study period covered by the grant (November 2011 – March 2014) with a 96% success rate abating the runoff with "cease and desist discharge" letters followed by additional outreach, assistance, and sometimes site visits. Site visits were conducted at twenty-five properties to understand and mitigate runoff. Of the eighty-three cases over the project period, only three remain open. Two of the illicit discharge cases (2%) required assistance from code enforcement to gain compliance. Seventeen of the eighty-three properties were beachfront properties (20%), and only one illicit discharge from a low priority nonpoint source over the two and a half year project period actually reached the receiving water (1%). The patrol program coupled with outreach efforts to correct the observed issues is successful, but labor intensive.

3.2.4.2 County Dry Weather Outfall Inspections

County staff has been regularly performing inspections of outfalls along the ASBS to document the presence or absence of flow and where needed, take action to eliminate prohibited discharges. A summary of these outfall inspections for 2012 and 2013 is provided on Table 3-3 and Table 3-4, respectively. Of the inspected outfalls, only ASBS-002 had flows reaching the surf. Flow from this outfall was noted reaching the surf once out of the 13 times visited in 2012 and once out of the three times visited in 2013. In both cases these flows reaching the surf were observed in the first month that inspections occurred (January and February for 2012 and 2013, respectively). The suspected source of the flow was over-irrigation in 2012; outreach to residents has been performed as detailed Section 3.2.1. It is anticipated that this outreach effort has addressed the potential source of the non-storm water flows. In 2013 the suspected source of the flow was from a nearby construction site, and City staff visited that construction site to ensure that appropriated BMPs were in place to prevent future discharges. Inspections performed March and May of 2013 at ASBS-002 indicated that flow was not present. Several other outfalls were observed with flows or ponded water; however, due to the distance between the outfall and the surf zone, these minor flows did not reach the receiving water. Inspections will continue to ensure that discharges of non-storm, non-authorized runoff do not occur.

Table 3-3. 2012 Outfall Dry Weather Inspections Summary

Outfall	Beach	January, 2012			February, 2012			March, 2012			April, 2012			Source / Notes
		No. of Visits	No. of Flow	No. Flow to Surf	No. of Visits	No. of Flow	No. Flow to Surf	No. of Visits	No. of Flow	No. Flow to Surf	No. of Visits	No. of Flow	No. Flow to Surf	
ASBS-001	Broad Beach	1	1		4	2		4	2		3	1		Undetermined
ASBS-002	Broad Beach				6	3	1	4	2		3	1		Over irrigation
ASBS-003	Broad Beach	1			6			4			3			
ASBS-004	Zuma Beach	1			5	4		4	4		2	1		Over irrigation
ASBS-005	Zuma Beach	1			5			4			2			
ASBS-006	Zuma Beach				5	1		4			2			Undetermined low flow
ASBS-007	Zuma Beach				5	4		4	4		2	2		Hillside dewatering
ASBS-008	Zuma Beach													
ASBS-009	Zuma Beach				5			4			2			
ASBS-010	Zuma Beach													
ASBS-011	Zuma Beach				5	2		4	4		2	1		Hillside dewatering
ASBS-012	Zuma Beach													
ASBS-013	Zuma Beach													
ASBS-014	Zuma Beach													
ASBS-015	Zuma Beach													
ASBS-016	Zuma Beach													
ASBS-017	Zuma Beach													
ASBS-018	Zuma Beach													
ASBS-019	Zuma Beach													
ASBS-020	Zuma Beach													
ASBS-021	Westward Beach													
ASBS-022	Westward Beach													
ASBS-023	Westward Beach				2	1		3			2	1		Undetermined low flow
ASBS-024	Westward Beach													
ASBS-025	Escondido Beach													
ASBS-026	Escondido Beach													
ASBS-027	Escondido Beach	1	1		3	3		5	4		1	1		Hillside dewatering
ASBS-028	Escondido Beach													
ASBS-029	Escondido Beach				3	3		5	4		1	1		Hillside dewatering
ASBS-030	Escondido Beach				3	1		5			1			Sudsy water
ASBS-031	Nicholas Beach													

Table 3-4. 2013 Outfall Dry Weather Inspections Summary

Outfall	Beach	February, 2013			March, 2013			May, 2013			July, 2013			Source / Notes
		No. of Visits	No. of Flow	No. Flow to Surf	No. of Visits	No. of Flow	No. Flow to Surf	No. of Visits	No. of Flow	No. Flow to Surf	No. of Visits	No. of Flow	No. Flow to Surf	
ASBS-001	Broad Beach	1			1			1						
ASBS-002	Broad Beach	1	1	1	1			1						Construction site. Corrected.
ASBS-003	Broad Beach	1			1			1						
ASBS-004	Zuma Beach	1	1		1	1		1	1		1			Over irrigation
ASBS-005	Zuma Beach	1			1			1			1			
ASBS-006	Zuma Beach	1			1			1			1			
ASBS-007	Zuma Beach	1	1		1	1		1	1		1			Hillside dewatering
ASBS-008	Zuma Beach	1			1			1			1			
ASBS-009	Zuma Beach	1			1			1			1			
ASBS-010	Zuma Beach	1			1			1			1			
ASBS-011	Zuma Beach	1	1		1	1		1	1		1	1		Natural stream north of PCH
ASBS-012	Zuma Beach	1			1			1			1			
ASBS-013	Zuma Beach	1			1			1			1			
ASBS-014	Zuma Beach	1			1			1			1			
ASBS-015	Zuma Beach	1			1			1			1			
ASBS-016	Zuma Beach	1			1			1			1			
ASBS-017	Zuma Beach	1			1			1			1			
ASBS-018	Zuma Beach	1			1			1			1			
ASBS-019	Zuma Beach	1			1			1			1			
ASBS-020	Zuma Beach	1			1			1			1			
ASBS-021	Westward Beach	1			1			1			1			
ASBS-022	Westward Beach	1			1			1			1	1		Trickle of water drops observed
ASBS-023	Westward Beach	1			1			1			1			
ASBS-024	Westward Beach	1			1			1			1			
ASBS-025	Escondido Beach	1			1									
ASBS-026	Escondido Beach	1			1									
ASBS-027	Escondido Beach	1			1									
ASBS-028	Escondido Beach	1			1									
ASBS-029	Escondido Beach	1	1		1	1								Hillside dewatering
ASBS-030	Escondido Beach	1			1									
ASBS-031	Nicholas Beach	1			1			1			1			

3.3 Inspection Program Assessment

Section I.A.2.c of the General Exception states that for MS4s, the ASBS Compliance Plan requires the following minimum inspection frequencies:

1. Weekly during the rainy season for construction sites.
2. Monthly during rainy season for industrial facilities.
3. Twice during the rainy season for commercial facilities.

In addition, the General Exception states that storm water drain outfalls equal to or greater than 18 inches in diameter or width will be inspected once prior to the beginning of the rainy season and once during the rainy season, and maintained to remove trash and other anthropogenic debris (SWRCB, 2012b).

Section 3.3.1 outlines the Parties' existing inspection programs and Section 3.3.2 outlines the recommended inspection program enhancements that would meet the requirements of the General Exception.

3.3.1 Existing Inspection Programs

The following sections outline the Parties' inspection programs that are currently in place. Discussions of specific LACDPW, District, and City inspections, where available, are limited to those areas draining to ASBS 24.

3.3.1.1 Commercial and Industrial Inspection Programs

Existing inspection programs for commercial and industrial facilities (e.g., restaurants, retail gasoline outlets (RGOs), automotive service facilities, United States Environmental Protection Agency (EPA) Phase I facilities, landfills) were conducted in accordance with the requirements of the 2001 NPDES permit (Order No. 01-182) (LARWQCB, 2001). The Permit included requirements for tracking, inspecting, and ensuring compliance for those facilities that are critical sources of storm water pollutants. The 2012 NPDES permit (Order No. R4-2012-0175) inspection frequencies are unchanged from the 2001 Permit requirements, although the minimum interval between inspections is reduced from 12 months to 6 months. The 2012 Permit also includes the requirement that commercial and industrial facility operators be notified of BMP requirements applicable to their site at least once during the 5-year permit cycle.

Commercial facility inspections are required by the NPDES Permit at a minimum of twice during the 5-year permit cycle. In 2008, the City began inspecting food-service related commercial businesses annually, exceeding the permit requirements. For industrial facilities, one industrial facility inspection is required within the first 2 years of the 2012 Permit and a second inspection is only required if an industrial facility has not filed a No Exposure Certification with the SWRCB. The City inspects RGOs and auto service facilities at least every other year, exceeding the permit requirement. The 2012 Permit requires follow-up inspections to be completed within 4 weeks of an infraction, and a minimum of two follow-up inspections and two enforcement letters must be issued to demonstrate a permittee's good faith effort to encourage a business to comply with the NPDES requirements.

Overall, the General Exception requires more frequent inspections than the NPDES permits. Commercial facility inspections are required at a minimum of twice per year during the rainy season. Industrial facility inspections are required a minimum of monthly, also during the rainy season. A summary of the seasonal minimum inspection frequencies required by the two NPDES permits and the General Exception for commercial and industrial facilities are presented on Table 3-5.

Table 3-5. Minimum Inspection Frequencies for Commercial and Industrial Facilities

Inspection Program	Inspection Frequency Required in ASBS 24	Historic Inspection Frequency, NPDES Permit Order R4-2012-0175	Historic Inspection Frequency, NPDES Permit Order No. 01-182
Commercial	Twice/year (rainy season)	Twice/5-year permit cycle, with at least 6 months between inspections	Twice/5-year Permit cycle, with at least one year between inspections[3]
Industrial[1]	Monthly (rainy season)	Twice/5-year permit cycle, with at least 6 months between inspections[2]	

[1]Industrial inspections frequencies will be implemented, if applicable to the ASBS 24 watershed.
[2] First inspection is required within 2 years of permit effective date. Second inspection (with at least 6 months between) is required before permit expiration if a No Exposure Certification has not been filed. Second inspections will also be performed at a minimum of 25% of facilities with No Exposure Certifications.
[3] No second inspection required at Phase I Tier II facilities determined to have no risk of exposure of industrial activities to storm water.

3.3.1.2 County Industrial and Commercial Inspection Program

The land use under the LACDPW's jurisdiction within the area draining to ASBS 24 is primarily undeveloped open space. There are no industrial facilities or commercial facilities within the area draining to ASBS 24 that must comply with the inspection frequencies outlined in the General Exception.

3.3.1.3 District Industrial and Commercial Inspection Program

Aside from its own properties and facilities, the District has no planning, zoning, development, permitting, or other land use authority over industrial or commercial facilities within its service area. As such, the District has no qualifying industrial or commercial facilities within the area draining to ASBS 24 that must comply with the inspection frequencies outlined in the General Exception.

3.3.1.4 City Industrial/Commercial Facilities Inspection Program

The goals of the City's commercial and industrial (should an industrial facility begin operating; there are currently no industrial facilities in the City) inspection program include compliance verification, enforcement as needed, and education regarding storm water and runoff issues, recycling, and City environmental quality ordinances.

The City's commercial and industrial inspection program is overseen by Environmental Programs staff. During an inspection, educational materials that may be provided include surface cleaning techniques, waste management, waste minimization, and recycling options; storm water pollution prevention tips; and potential BMPs tailored to the inspected business. Businesses may

call City staff with any storm water- or inspection-related questions. City Environmental Programs staff also coordinates interdepartmentally with other City staff including the code enforcement officer ,Public Works and the Building Safety inspectors, who have been trained to watch for storm water BMP infractions and are authorized to issue correction notices in the field. Code Enforcement and the Environmental Programs staff work together to issue cease-and-desist letters if violations have not been corrected. Repeat offenses are subject to increased enforcement procedures and may be subject to Malibu's administrative citation ordinance, exposing the violator to civil penalties as well as traditional enforcement remedies.

The City conducts annual inspections of food-service commercial facilities and at least every other year on automotive related service facilities, going above and beyond the historic requirements of the NPDES Permit. There is not an extensive base of commercial businesses operating within the City. As reported in the 2011-2012 Annual Report (City, 2012), the City inspected 60 restaurants/food service-related businesses, three grocers,[1] six RGOs, and three automotive services[2] during the reporting year. Only a subset of these commercial businesses is located within the ASBS 24 watershed. Based on a review of available data, the area draining to ASBS 24 contains approximately 15 businesses that sell or serve food, three inns/motels/hotels, a couple of other stores, and one service station.

In conjunction with the annual commercial inspection program, the City implements the Clean Bay Restaurant Certification program of the Bay Foundation in partnership with several other agencies in the south Santa Monica Bay area specifically for food-service related businesses. Through the program, restaurants and other food management businesses are inspected and certified for proper handling of waste, managing wash water, and implementing environmental policies that protect the storm drain system and ultimately the ocean receiving waters. The program certifies businesses as either 100% compliant with all program criteria or as non-compliant and therefore not certified under the Clean Bay Restaurant program. The program's primary success stems from brand recognition. It is a benefit to the partner agencies to work together in a larger regional and more recognized certification program so they may share resources such as promotional items and marketing materials, the advantage of Bay Foundation staff helping to promote the program at special events, and a standardized protocol; in essence, taking advantage of strength in numbers. As popularity and name recognition increases, there is a greater incentive to be certified in the program and more businesses will want to participate and take the extra steps to ensure they maintain certification. If a participant is found to not meet criteria or have a violation during the year that they are certified, they are subject to a strict rescinding policy and may have the certification revoked until the next period. The City's 2011-2012 Annual Report indicated that 93% of relevant businesses under the City's jurisdiction were currently certified under the program (City, 2012).

The City has complied with requirements to conduct inspections of industrial facilities when applicable. Industrial land use is very limited within the City's jurisdiction; in the 2011-2012 Annual Report, only one facility had active coverage under the State Industrial Activities Storm

[1] During the 2012-2013 annual reporting year, the Hughes Market grocery closed for business. The business will be replaced with a new organic grocer.
[2] All four RGOs that formerly housed automotive bays no longer offer these services. Two of the automotive service facilities are primarily RGOs.

Water General Permit and was in the process of terminating coverage. This business is under new ownership and is now a hardware store. Additionally, this industrial facility was in the Malibu Creek Watershed, not in a watershed draining to ASBS 24.

The City is exploring protocols to more readily identify any new commercial and industrial facilities located within the area draining to ASBS 24 and ensure that inspections are implemented in accordance with the General Exception requirements. All current commercial facilities have been identified. There are no industrial facilities.

3.3.1.5 Construction Site Inspection Programs

In accordance with the Los Angeles County Municipal NPDES Permit, permittees are required to develop, implement, and enforce a construction program that prevents illicit construction-related discharges of pollutants into the MS4 and receiving waters; implements and maintains structural and nonstructural BMPs to reduce pollutants in storm water runoff from construction sites; reduces construction site discharges of pollutants to the MS4 to the maximum extent practicable; and prevents construction site discharges to the MS4 from causing or contributing to a violation of water quality standards.

Existing construction site inspection programs were implemented in accordance with the requirements of the 2001 NPDES permit. The Permit requires permittees to inspect all construction sites (1 acre and greater) a minimum of once during the wet season and requires implementation of BMPs such as inspection of graded areas during rain events to control erosion from slopes and channels. For all construction sites where a Storm Water Pollution Prevention Plan (SWPPP) is not adequately implemented, permittees are required to conduct a follow-up inspection within 2 weeks of the initial inspection. In addition, proof of a Waste Discharger Identification (WDID) number for filing a Notice of Intent (NOI) for coverage under the General Construction Storm Water Permit and certification that a SWPPP has been prepared is required prior to issuance of a grading permit. Permittees are also required to use a database or other effective system to track grading permits for construction sites totaling 5 acres or greater. In the case of violations, two follow-up inspections within 3 months and two enforcement letters must be issued to demonstrate a permittee's good faith effort to encourage a business to comply with the NPDES requirements.

The 2012 NPDES Permit outlines the new, more stringent requirements for construction site frequency that became effective on December 28, 2012. According to the 2012 NPDES Permit, construction sites with a minimum of 1 acre of soil disturbance must be inspected by permittees a minimum of three times (e.g., prior to land disturbance, during active construction, and at the conclusion of the project) and at least monthly during the rainy season. Additionally, sites that discharge to a water body listed on the Section 303(d) List as impaired for sediment or turbidity, or determined to be a "significant threat to water quality," will be inspected by permittees at least once every 2 weeks during the rainy season. All sites will be inspected prior to a forecasted storm event[3] and within 48 hours after a recorded storm event.[4] The 2012 NPDES Permit

[3] A forecast storm event is defined by the NPDES permit as two or more consecutive days with a greater than 50% chance of rainfall that has been predicted by the National Oceanic and Atmospheric Administration (NOAA). This definition is in agreement with the definition of a storm event in the Construction General Permit.

requires construction sites consisting of less than 1 acre of soil disturbance to be managed through the permittees' erosion and sediment control ordinances and building permit requirements. These smaller construction sites shall be inspected on an as-needed basis. The inspection requirements of the 2012 NPDES Permit are in addition to the visual inspection programs implemented by the construction contractor's Qualified SWPPP Practitioner in accordance with the requirements of the Construction General Permit.[5] Under the 2012 NPDES Permit, permittees are required to use an electronic system to inventory permits for all construction sites.

The General Exception requires more frequent inspections than the 2012 NPDES Permit in areas draining to ASBS 24. Construction sites, defined as sites with 1 acre or more of disturbance (SWRCB, 2010), must be inspected weekly during the rainy season. A summary of the seasonal minimum inspection frequencies required by the two NPDES permits and the General Exception are presented on Table 3-6.

Table 3-6. Minimum Inspection Frequencies for Construction Sites (1 Acre or Greater)

Inspection Program	Inspection Frequency Required in ASBS 24	Historic Inspection Frequency, NPDES Permit Order R4-2012-0175	Historic Inspection Frequency, NPDES Permit Order No. 01-182
Construction	Weekly (rainy season)	Three times (before, during, and following construction) and: Monthly (rainy season) or Once every two weeks (rainy season)*	Once/year, following rain event

*For construction sites tributary to a water body on the Section 303(d) List due to sediment or turbidity.

3.3.1.6 County Construction Site Inspection Program

The LACDPW Architectural Engineering, Construction, and Building and Safety Divisions, along with applicable County departments, are responsible for County construction inspections. The LACDPW's construction program requires all construction projects to develop and implement erosion and sediment control BMP plans prior to the start of construction (i.e., Wet Weather Erosion Control Plan [WWECP] for sites less than one acre of disturbed land, Local Storm Water Pollution Prevention Plan [LSWPPP] and a WWECP for sites greater than 1 acre of disturbed land). The LSWPPP must include year-round BMPs to control pollutants that originate from the construction site due to construction activities.

[4] A recorded storm event is defined in the NPDES permit as a ½-inch rain event. This definition is in agreement with the definition of a storm event in the Construction General Permit.

[5] In accordance with the Construction General Permit, non-storm water visual inspections are required weekly for Risk Level 1, 2, and 3 projects. These inspections are recorded quarterly and performed daily for LUP Type 1, 2, and 3 projects. Inspections are also required before forecasted storm events and within 48 hours of a recorded storm event.

In addition to filing an LSWPPP, for projects greater than 1 acre, the applicant must file a NOI per the State General Construction Storm Water Permit and obtain a WDID number from the State Water Resources Control Board (SWRCB, 2010). Prior to grading plan approvals, the LACDPW requires the applicant to submit copies of the NOI, WDID, and SWPPP. Projects are notified of any required changes to the SWPPP and BMPs prior to the start of the rainy season. Inspections occur thereafter, and also after each significant rainfall event. Post-construction structural BMPs are inspected annually as part of the permit renewal process. In the event that enforcement actions are taken, they occur in the order listed: warnings, stop-work notices, office meetings, notices of violation, referrals to the Regional Board, and fines or non-payment of general contractor's invoices until the violation is corrected.

The LACDPW has begun implementing new protocols to identify and track active construction sites located within the area draining to outfalls that discharge to the ASBS 24 in order to ensure that inspections are implemented in accordance with the General Exception schedule requirements, where applicable.

3.3.1.7 District Construction Site Inspection Program

Aside from its own properties and facilities, the District has no planning, zoning, development, permitting, or other land use authority over new developments or redevelopment projects, or development construction sites within its service area. Under the 2012 NPDES Permit, the District is subject to the minimum control measures of a Public Agency Activities Program, which differ from the minimum control measures imposed on other permittees. Only the Public Construction Activities Management Program, a component of the Public Agency Activities Program, could potentially be applicable to District facilities within the area draining to ASBS 24. When active construction sites under the jurisdiction of District are located within the area draining to ASBS 24, internal construction site inspections would be implemented in accordance with the existing inspection criteria defined by the LACDPW, as discussed in Section 3.3.1.6.

3.3.1.8 City Construction Site Inspection Program

Grading within the City is limited to single-lot development. The area of disturbance is restricted due to development constraints implemented by the City of Malibu Local Coastal Plan and the Municipal Code. The Development Construction Inspection Program is implemented by the Environmental Sustainability Department and the Public Works Department. Applicants are notified if an NOI for coverage under the State General Construction Storm Water Permit is required, and plans are not approved until proof of a WDID has been submitted.

The City's construction inspection program for all sediment-disturbing projects begins with a pre-grading meeting with the general contractor, deputy building official, and building safety inspector (occasionally the LACDPW inspector). At the pre-grading meeting, the SWPPP is reviewed and appropriate BMPs, including sediment and erosion controls, are discussed, and the implementation schedule is developed by construction phase. During the meeting, it is stressed to all contractors that the job site will be shut down until the required measures are in place if the contractor fails to comply. The SWPPP is discussed with the general contractor at commencement of building construction activities, with a reminder of the repercussions (i.e., tiered enforcement actions, up to and including site closure) of failing to comply. Project sites

are visited regularly during the grading phase. During the construction phase, the building inspector routinely conducts on-site inspections. The implementation and maintenance of the appropriate BMPs are checked at each inspection.

Violations are addressed immediately. All issues receive an Initial Notice of Violation/Warning and corrective actions are required with strict compliance deadlines (24 hours during rainy weather and up to 72 hours during non-critical times). Sites are then re-inspected to verify compliance and a stop-work order may be issued until compliance is verified (City, 2012).

In accordance the General Construction Permit construction projects of 1 acre or greater are inspected at least twice during the rainy season The City currently inspects all construction sites monthly, and higher risk construction sites before/during rain events as of the 2013-2014 winter. The City has begun implementing new protocols to identify and track active single-lot construction sites located within the area draining to outfalls that discharge to the ASBS 24 to ensure that construction site inspections are implemented weekly during the rainy season, in accordance with the General Exception requirements (summarized on Table 3-6).

3.3.1.9 Storm Drain Outfall Inspection and Cleaning Programs

Existing storm drain inspection programs were implemented in accordance with the requirements of the 2001 NPDES Permit . Each permittee was required to implement a Public Agency Activities Program to minimize storm water pollution impacts and to identify opportunities to reduce these impacts from areas of existing development. One of the activities covered under the Public Agency Activities Program is storm drain operation and maintenance, which includes visual monitoring of open-channels and other drainage structures for trash and debris at least annually; removal of trash and debris from open channels at least once annually prior to the wet season; elimination of the discharge of contaminants during MS4 maintenance; and proper disposal of debris and trash removed during storm drain maintenance. The storm drain inspection frequency was not modified in the 2012 NPDES Permit .

In addition to the annual inspection required by the NPDES Permits, the General Exception requires an additional inspection during the rainy season. A summary of the minimum inspection frequencies required by the two NPDES Permits and the General Exception is presented on Table 3-7.

Table 3-7. Minimum Inspection Frequencies for Storm Drain Outfalls

Inspection Program	Inspection Frequency Required in ASBS 24	Historic Inspection Frequency, NPDES Permit Order R4-2012-0175	Historic Inspection Frequency, NPDES Permit Order No. 01-182
MS4 outfalls	Once prior to rainy season; once during rainy season	Once/year, before the rainy season	Once/year, before the rainy season

3.3.1.10 County MS4 Outfall Inspection Program

Systems within the area draining to ASBS 24 that are at least 18 inches in diameter are generally located in the parking lots along County beaches. Beach sand frequently piles up in the outlet of these systems. These outfalls are cleared by DBH prior to the rainy season and catch basin systems are cleaned out in late summer or early fall, prior to the rainy season and again during

the rainy season, as part of the LACDPW's Road Maintenance Division annual drainage inspection program.

The LACDPW has begun implementing new protocols to identify applicable outfalls that discharge to ASBS 24 to ensure that inspections are implemented in accordance with the General Exception schedule requirements (i.e., in addition to prior to the rainy season, second inspection to be performed during the rainy season).

3.3.1.11 City MS4 Outfall Inspection and Cleaning Program

The City's Storm Drain/Culvert Facilities Maintenance program is in place for annual and post-storm inspection and cleaning of storm drain facilities. All storm drain inlets are cleaned annually, and priority storm drains are cleaned at a minimum of twice annually. This program ensures that litter, debris, and pollutants are removed to prevent them from getting into the local waterways and impacting beneficial uses. In collaboration with LACDPW, the City will be conducting similar protocols to identify outfalls that discharge to ASBS 24. In general, citywide outlets are inspected when accessible. No applicable ASBS outlets are owned by the City. A contract service provider conducts the culvert cleaning and maintenance work on behalf of the City.

3.3.2 Inspection Program Enhancements to Comply with ASBS Special Protection Requirements

As the Parties modify their inspection programs to comply with the requirements of the current 2012 NPDES Permit, the Parties will need to include enhanced protocols for inspection programs implemented for sites within the area draining to outfalls that discharge to the ASBS 24. The inspection program requirements of the 2012 NPDES Permit and the General Exception are presented in Section 3.3.1 and the details of the required program enhancements are discussed in the following sections.

3.3.2.1 County Inspection Program Enhancements

The recommended enhancements to the LACDPW's existing inspection program are presented on Table 3-8 and include:

- During the rainy season, increase the inspection frequency to once per week for construction sites (at least 1 acre) under the LACDPW's jurisdiction that are located within the applicable area draining to ASBS 24.
- Conduct inspection and cleaning of storm drain outfalls measuring at least 18 inches in diameter or width catch basins that are located within the area draining to ASBS 24 once prior to the rainy season and once during the rainy season, at a minimum.

Table 3-8. County Inspection Program Enhancements

Program	Enhancement	Frequency
Commercial	Not applicable	-
Industrial	Not applicable	-
Construction (at least 1 acre)	Increase inspection frequency	Once/week (rainy season)
Storm Drain Outfalls	Coordinate inspections with	Once/dry season (prior to rainy season)

	ASBS criteria	and once/rainy season/year

3.3.2.2 District Inspection Program Enhancements

The recommendations for the DPW's inspection program are presented on Table 3-9 and include the following:

- When the District's active construction sites (at least 1 acre) are located within the applicable area draining to ASBS 24, District will implement inspections once per week during the rainy season in accordance with Special Protections and during the dry season in accordance with the requirements of the 2012 NPDES Permit.
- Conduct inspection and cleaning of storm drain outfalls measuring at least 18 inches in diameter or width catch basins which are located within the area draining to ASBS 24 once prior to the rainy season and once during the rainy season, at a minimum.

Table 3-9. District Inspection Program Enhancements

Program	Enhancement	Frequency
Commercial	Not applicable	-
Industrial	Not applicable	-
Construction (at least 1 acre)	Increase inspection frequency	Once/week (rainy season)
Storm Drain Outfalls	Coordinate inspections with ASBS criteria	Once/dry season (prior to rainy season) and once/rainy season/year

3.3.2.3 City Inspection Program Enhancements

The recommended enhancements to the City's existing inspection program are presented on Table 3-10 and include the following:

- During the wet season, increase the inspection frequency for construction sites (at least 1 acre) within the City's jurisdiction that are located within the applicable area draining to ASBS 24 to once per week.
- The outfalls associated with City maintained inlets are located on private properties and considered private. The City does not own or maintain outfalls that discharge to ASBS 24. As such, no enhancements are currently proposed for the City to inspect and clean outfalls.

Table 3-10. City Inspection Program Enhancements

Program	Enhancement	Frequency
Commercial	Increase inspection frequency	Twice/year (rainy season)
Industrial	Currently not applicable based on existing land uses	-
Construction (at least 1 acre)	Increase inspection frequency	Once/week (rainy season)

4.0 RECEIVING WATER ASSESSMENT

A determination of whether there is currently an exceedance of the natural water quality of the ASBS is the first step in the process of assessing the potential pollutant load reductions targets required to enhance the water quality of the ASBS. Wet weather receiving water quality monitoring data results were evaluated in comparison to data for reference monitoring sites, in accordance with the flowchart provided as Attachment 1 to the General Exception, to determine if an exceedance of the natural water quality currently exists.

4.1 Determination of Compliance with Natural Water Quality

In 2008, a study was conducted as part of Bight 2008 to assess water quality in southern California ASBS (Schiff et al., 2011). The study was designed to evaluate the range of natural water quality near reference drainage locations and to compare water quality near ASBS discharges to these natural water quality conditions. Additional reference monitoring was performed under the Regional Monitoring Program. During the development of this draft Compliance Plan, compliance with natural water quality was determined by comparing receiving water data from wet weather monitoring recently conducted for ASBS 24 to the 85th percentile threshold of reference sample concentrations measured during Bight 2008 and Bight 2013.

Concentrations of pollutants in post-storm receiving water were compared to those in pre-storm receiving water and to the 85th percentile threshold of reference sample concentrations. When post-storm receiving water concentrations are greater than the 85th percentile threshold and are greater than pre-storm concentrations for two or more storm events, results from the next storm are analyzed. If post-storm receiving water concentrations are again greater than the 85th percentile threshold and pre-storm concentrations, the constituent(s) are classified as exceedances of natural water quality. Concentrations of TSS, ammonia, nitrate, total orthophosphate, and total metals were compared to the 85th percentile thresholds.

Wet weather monitoring was performed by LACDPW at two receiving water locations: 1) S01, located off Zuma Beach directly out from ASBS-016, a 60-inch storm drain; and 2) S02, located off Escondido Beach, directly out from ASBS-028, a 36-inch storm drain. Monitoring was conducted during storm events occurring on February 19 and March 8, 2013, and February 28, 2014. Wet weather flows from ASBS-016 only reached the ocean receiving water at S01 during the February 28, 2014, monitored event. The City performed monitoring at receiving water Site 24-BB-03R. For safety reasons, this site was only sampled during the February 28, 2014, event. Therefore, the assessment of compliance with natural water quality was primarily performed for receiving water station S02, which had samples collected during three wet weather events. Receiving water station S02 is associated with ASBS-028, which is a 36-inch outfall that drains a mixture of developed and vacant land. There are additional identified point source clustered west and east of this site with three (ASBS-025, ASBS-026, and ASBS-027) located to the west (within 0.25 miles) and two (ASBS-029 and ASBS-030) located to the east (within 0.1 miles). Therefore, receiving water station S02 is considered to be representative of the typical to worst case scenario of the potential impact that storm water runoff may have on the water quality within the ASBS. Figure 4-1 shows the locations of the receiving water stations monitored in support of the preparation of this Plan.

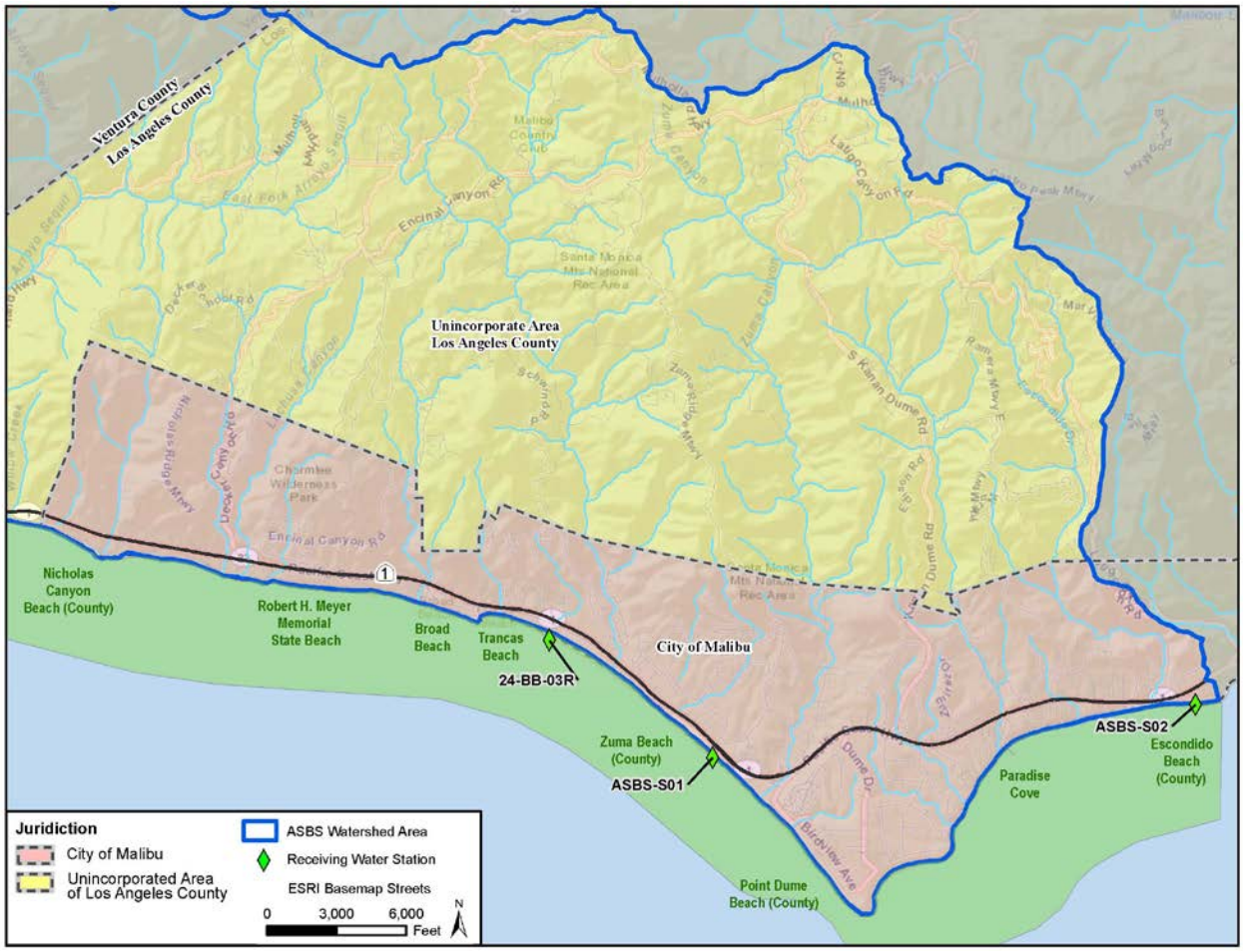

Figure 4-1. ASBS 24 Receiving Water Monitoring Locations

4.1.1 February 19, 2013, Storm Event Receiving Water Monitoring

The February 2013 storm event resulted in approximately 0.12 inches of rainfall based on rain gauge data obtained from County Fire Station 70 located at 3970 Carbon Canyon Road in Malibu, CA. Receiving water results were compared to the available list of constituents of reference site 85th percentile values. Post-storm concentrations of nitrate as nitrogen (N), selenium, total PAHs, and total pyrethroids were greater than the 85th percentile threshold (see Table 4-1). However, the nitrate as N post-storm concentration was less than the pre-storm concentration; therefore, the nitrate as N concentration is considered to be similar to background concentrations and is not classified as an exceedance. Since the selenium, total PAHs, and total pyrethroids concentrations were greater than the 85th percentile threshold and were greater than pre-storm concentrations, results from the proceeding storm event were analyzed to determine whether the natural water quality has been exceeded.

For constituents that are summed to get total values for comparison to 85th percentile total values (e.g., all OP pesticides, total PAHs, total pyrethroids), half of the method detection limits (MDL) were used for non-detect values. In the case of total pyrethroids for example, the reference sampling resulted in all non-detect values, and therefore the summation of the MDLs for the 10

selected pyrethroids is 6.75 µg/L. Following this process to determine total pyrethroids for the ASBS 24 receiving water stations results in an exceedance of 85th percentile threshold value anytime a pyrethroid included in the assessment has a measurable result (i.e., 85th percentile threshold in reality is zero). In actuality, the individual pyrethroid values may be less than half the MDL values (undetermined currently based on laboratory limitations) resulting in the possibility that the total pyrethroid value is less than the 85th percentile threshold. The same is true for both all OP pesticides and total PAHs assessments.

Table 4-1. February 2013 Receiving Water Results

Parameter	Units	85th Percentile of Reference Data	S01-PRE 2/18/2013	S02-PRE 2/18/2013	S02-POST 2/19/2013
General Chemistry					
Ammonia as N	mg/L	0.015	0.09	0.04J	<0.02
Nitrate as N	mg/L	0.374	0.51	0.38	0.25
Oil & Grease	mg/L	0.5	14.1	<1	<1
Total Orthophosphate as P	mg/L	0.114	0.02	0.02	0.03
Total Suspended Solids	mg/L	55.4	5.2	7.9	40.5
Total Metals					
Arsenic (As)	µg/L	`	1.718	1.471	1.393
Cadmium (Cd)	µg/L	0.16	0.0229	0.0601	0.058
Chromium (Cr)	µg/L	2.6	0.3192	0.5437	0.6366
Copper (Cu)	µg/L	1.9	0.149	0.321	0.454
Lead (Pb)	µg/L	0.72	0.0513	0.102	0.1867
Mercury (Hg)	µg/L	0.0006	<0.0012	<0.0012	<0.0012
Nickel (Ni)	µg/L	2.2	0.2724	0.509	0.7661
Selenium (Se)	µg/L	0.017	0.007J	0.015	0.031
Silver (Ag)	µg/L	0.08	0.03	0.01J	<0.01
Zinc (Zn)	µg/L	19	1.0376	1.2033	12.2809
Organophosphorus Pesticides					
*All OP Pesticides	ng/L	6	6	6	6
Polynuclear Aromatic Hydrocarbons					
*Total PAHs	ng/L	12.5	12.5	12.5	41.1
Pyrethroids					
Bifenthrin	ng/L		<0.5	<0.5	<0.5
Deltamethrin/Tralomethrin	ng/L		<0.5	<0.5	<0.5
Esfenvalerate	ng/L		1.1J	<0.5	0.8J
All Other Pyrethroids	ng/L		ND	ND	ND
*Total Pyrethroids	ng/L	6.75	8.6	6.75	7.3

< - result less than the MDL.
ND - results less than the MDLs (multiple MDL values)
J - Analyte was detected at a concentration below the reporting limit and above the method detection limit. Reported value is estimated.

Red outline – Post-storm receiving water concentration is greater than 85th percentile of Reference Data AND greater than pre-storm concentration.

*Totals calculated using result values when if detected and half the MDL when results were <MDL.

4.1.2 March 8, 2013, Storm Event Receiving Water Monitoring

The March 2013 storm event resulted in approximately 0.74 inches of rainfall based on rain gauge data obtained from County Fire Station 70. The selenium and total PAHs concentrations in the receiving water were again greater than both the 85th percentile threshold and pre-storm concentrations (see Table 4-2). As a result, the concentrations of both constituents are considered to be exceedances of natural water quality and may be contributing to alterations in natural ocean water quality within ASBS 24. In addition, concentrations of nitrate as N, copper, lead, mercury, zinc, and total PAHs were greater than both the 85th percentile threshold and pre-storm concentrations. Results from the subsequent monitored wet weather event (February 2014) were used to evaluate whether the listed constituents in storm water runoff were considered to be contributing to an exceedance of natural water quality.

The receiving water Site S02 results for the first monitored event (February 2013 event) included a concentration total pyrethroid that was greater than both the 85th percentile threshold and pre-storm concentrations (see Table 4-1). The February 2014 receiving water Site S02 concentration for total pyrethroid was not greater than both the 85th percentile threshold and pre-storm concentrations (see Table 4-2).

Table 4-2. March 2013 Receiving Water Results

Parameter	Units	85th Percentile of Reference Data	S01-PRE 3/6/2013	S02-PRE 3/6/2013	S02-POST 3/8/2013
General Chemistry					
Ammonia as N	mg/L	0.015	0.04J	0.03J	<0.02
Nitrate as N	mg/L	0.374	0.48	0.49	0.54
Oil & Grease	mg/L	0.5	<1	<1	<1
Total Orthophosphate as P	mg/L	0.114	0.03	0.03	0.06
Total Suspended Solids	mg/L	55.4	3.8	14.9	33.3
Total Metals					
Arsenic (As)	µg/L	1.72	1.558	1.563	1.577
Cadmium (Cd)	µg/L	0.16	0.0281	0.0587	0.1396
Chromium (Cr)	µg/L	2.6	0.2422	0.6549	2.5224
Copper (Cu)	µg/L	1.9	0.157	0.378	2.924
Lead (Pb)	µg/L	0.72	0.0288	0.1558	1.0434
Mercury (Hg)	µg/L	0.0006	<0.0012	<0.0012	0.0046J
Nickel (Ni)	µg/L	2.2	0.2849	0.625	1.8595
Selenium (Se)	µg/L	0.017	0.008J	0.017	0.052
Silver (Ag)	µg/L	0.08	<0.01	0.01J	<0.01
Zinc (Zn)	µg/L	19	2.6986	37.8762	54.1039
Organophosphorus Pesticides					
*All OP Pesticides	ng/L	6	6	6	6
Polynuclear Aromatic Hydrocarbons					
*Total PAHs	ng/L	12.5	12.5	12.5	25.5
Pyrethroids					
Bifenthrin	ng/L		<0.5	<0.5	8.4
Deltamethrin/Tralomethrin	ng/L		10.6	26.6	<0.5
Esfenvalerate	ng/L		<0.5	<0.5	<0.5
All Other Pyrethroids	ng/L		ND	ND	ND
*Total Pyrethroids	ng/L	6.75	19.85	35.85	17.65

< - result less than the MDL.
ND - results less than the MDLs (multiple MDL values)
J - Analyte was detected at a concentration below the reporting limit and above the method detection limit. Reported value is estimated.
Red outline – Post-storm receiving water concentration is greater than 85th percentile of Reference Data AND greater than pre-storm concentration.
Orange fill – Analyte concentration has exceeded 85th percentile of Reference Data during 1st and 2nd monitoring event.
*Totals calculated using result values if above the MDL and half the MDL when results were less than the MDL.

4.1.3 February 28, 2014, Storm Event Receiving Water Monitoring

The February 2014 storm event resulted in a total event rainfall of approximately 2.26 inches of rainfall based on rain gauge data obtained from County Fire Station 70. Pre- and post-storm samples were collected at Sites S01, S02, and 24-BB-03R.

The concentrations of total orthophosphate as P, TSS, mercury, selenium, silver, total PAHs, and total pyrethroids in receiving water at Site S02 were greater than both the 85th percentile threshold and pre-storm concentrations (see Table 4-3). Based on the results from the first and second monitored events in accordance with the General Exception, selenium and total PAHs are considered to be exceedances of natural water quality. The selenium and total PAHs results at Site S02 from the February 2014 event are consistent with those previous data. The mercury result being higher than both the 85th percentile threshold and pre-storm concentration for the second consecutive monitored event is considered to be exceedance of the natural water quality and may be contributing to alterations in natural ocean water quality within ASBS 24. Of the three storms monitored, the February 2014 events results for Site S02 are the only one where orthophosphate as P, TSS, or silver were above both the 85th percentile threshold and pre-storm concentrations. Therefore, the receiving water Site S02 measured concentrations of total orthophosphate as P, TSS, and silver being above both the 85th percentile threshold and pre-storm concentrations during one event are not considered to be exceedances of natural water quality.

The receiving water Site S02 results for the second monitored event (March 2013 event) included concentrations of nitrate as N, copper, lead and zinc that were greater than both the 85th percentile threshold and pre-storm concentrations (see Table 4-2). The February 2014 receiving water Site S02 concentrations for nitrate as N, copper, lead, and zinc were not greater than both the 85th percentile threshold and pre-storm concentrations (see Table 4-3), and therefore these constituents are not considered to be exceedances of the natural water quality.

Mercury, silver, zinc, and total PAHs concentrations in receiving water were greater than both the 85th percentile threshold and pre-storm concentrations for Site S01 (see Table 4-3). This monitored event was the only one of three in which flow from ASBS-016 reached the receiving water at Site S01, and thus, was the only time receiving water chemistry data were obtained at S01 as part of the General Exception monitoring. Based on first and second event results for Site S02, total PAHs is considered to be an exceedances of natural water quality. Based on second and third event results for Site S02, mercury is considered to be an exceedance of natural water quality. The receiving water Site S01 measured concentrations of silver and zinc being above both the 85th percentile threshold and pre-storm concentrations during one event is not considered to be an exceedance of natural water quality.

Pre-storm and post-storm samples were collected and analyzed at Site 24-BB-03R. For safety reasons, this site was not sampled previous to this event. The selenium concentration in the receiving water was greater than both the 85th percentile threshold and pre-storm concentrations for Site 24-BB-03R (see Table 4-3). The concentration of selenium being above the 85th percentile threshold and pre-storm concentrations is not considered an exceedance of natural water quality at Site 24-BB-03R. The selenium result at Site 24-BB-03R above the 85th percentile threshold and pre-storm concentrations are consist with the results for Site S02 where

selenium is considered to be an exceedance of natural water quality based on the first and second event results.

Table 4-3. February 2014 Receiving Water Results

Parameter	Units	85th Percentile of Reference Data	S01-PRE	S01-POST	S02-PRE	S02-POST	24-BB-03R-PRE	24-BB-03R-POST
			2/25/2014	2/28/2014	2/25/2014	2/28/2014	2/25/2014	2/28/2014
General Chemistry								
Ammonia as N	mg/L	0.015	<0.02	<0.02	<0.02	<0.02	ND	ND
Nitrate as N	mg/L	0.374	0.03J	0.02J	0.02J	<0.01	0.04	ND
Oil & Grease	mg/L	0.5	<1	<1	<1	<1	ND	ND
Total Orthophosphate as P	mg/L	0.114	0.02	0.02	0.02	0.18	0.02	0.02
Total Suspended Solids	mg/L	55.4	19.5	25.2	87.7	150	10.8	7.1
Total Metals								
Arsenic (As)	µg/L	1.72	1.472	1.283	6.604	4.122	1.388	1.322
Cadmium (Cd)	µg/L	0.16	0.0249	0.0228	0.5099	0.2623	0.0152	0.022
Chromium (Cr)	µg/L	2.6	1.1131	0.3893	26.0119	4.9578	1.4705	0.6962
Copper (Cu)	µg/L	1.9	0.676	0.221	6.001	2.289	0.167	0.646
Lead (Pb)	µg/L	0.72	0.2367	0.0584	7.265	1.5477	ND	0.2159
Mercury (Hg)	µg/L	0.0006	<0.0012J	0.014	<0.0012	0.0261	ND	ND
Nickel (Ni)	µg/L	2.2	0.8679	0.3565	21.5664	4.2441	0.2951	0.4901
Selenium (Se)	µg/L	0.017	0.016	0.011J	0.083	0.155	0.012	0.026
Silver (Ag)	µg/L	0.08	0.09	0.18	0.03	0.14	0.14	0.12
Zinc (Zn)	µg/L	19	5.3515	21.0509	41.7076	12.0229	2.9144	17.3532
Organophosphorus Pesticides								
*All OP Pesticides	ng/L	6	6	6	6	6	6	6
Polynuclear Aromatic Hydrocarbons								
*Total PAHs	ng/L	12.5	17.4	18.5	29.6	84.1	19.2	18.8
Pyrethroids								
Bifenthrin	ng/L		<0.5	<0.5	<0.5	2.5	<0.5	<0.5
Deltamethrin/Tralomethrin	ng/L		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Esfenvalerate	ng/L		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
All Other Pyrethroids	ng/L		ND	ND	ND	ND	ND	ND
*Total Pyrethroids	ng/L	6.75	6.75	6.75	6.75	9	6.75	6.75

< - result less than the MDL.
ND - results less than the MDLs (multiple MDL values)
J - Analyte was detected at a concentration below the reporting limit and above the method detection limit. Reported value is estimated.
Red outline – Post-storm receiving water concentration is greater than 85th percentile of Reference Data AND greater than pre-storm concentration.
Orange fill – Analyte concentration has exceeded 85th percentile of Reference Data during 1st and 2nd monitoring event.
*Totals calculated using result values if above the MDL and half the MDL when results were less than the MDL.

4.1.4 Receiving Water Monitoring Conclusions

In post-storm samples collected in the receiving water (Site S02), selenium and total PAHs concentrations were above the 85th percentile reference threshold and had post-storm concentrations that exceeded those of the pre-storm samples collected during three consecutive monitored storm events (February and March 2013 and February 2014)Mercury results at Site S02 were above 85th percentile reference threshold and pre-storm concentrations for two consecutive events (March 2013 and February 2014). Based on the guidance found in

Attachment 1 of the General Exception, this indicates an exceedance of natural water of the ASBS for these constituents.

Receiving water samples (Site S02) collected during the second monitored event had concentrations of nitrate as N, copper, lead, and zinc above the 85th percentile reference thresholds and were above the pre-storm concentrations. Based on Attachment 1 of the General Exception, if these constituents are above the 85th percentile reference thresholds in post-storm receiving water samples collected during the next monitoring event, then there would be an exceedance in the natural water quality of the ASBS for these additional constituents. February 2014 receiving water (Site S02) concentrations for nitrate as N, copper, lead, and nickel were not greater than both the 85th percentile threshold and pre-storm concentrations, and these constituents are not considered an exceedance of natural water quality.

Of the three storms monitored, the only event in which flow from ASBS-016 reached the receiving water at Site S01 was during the February 28, 2014, storm (third monitored event), and thus, was the only time receiving water chemistry data were obtained at S01 as part of the General Exception monitoring. Mercury, silver, zinc and total PAHs concentrations in receiving water were greater than both the 85th percentile threshold and pre-storm concentrations for Site S01. Based on the Site S02 results from the first and second events total PAHs is considered to be exceedance of natural water quality. Based on the Site S02 results from the second and third events mercury is considered to be exceedance of natural water quality. The receiving water Site S01 measured concentrations of silver and zinc being above both the 85th percentile thresholds and pre-storm concentrations during one event is not considered to be exceedances of natural water quality.

Pre-storm and post-storm samples were collected and analyzed at Site 24-BB-03R. For safety reasons, this site was not sampled previous to this event. The selenium concentration in receiving water was greater than both the 85th percentile threshold and pre-storm concentration for Site 24-BB-03R (see Table 4-3). The concentration of selenium being above the 85th percentile threshold and pre-storm concentrations is not considered an exceedance of natural water quality at Site 24-BB-03R. The selenium results at Site 24-BB-03R above the 85th percentile threshold and pre-storm concentrations are consistent with the results for Site S02 where selenium is considered to be an exceedance of natural water quality based on the first and second event results

4.2 Bight 2008 Data for ASBS 24

A review of Bight 2008 ASBS 24 data was conducted, and a summary of the review is provided for reference and for comparison to the determination made in this Compliance Plan. Bight 2008 constituent concentrations values were obtained from a series of graphs provided as an appendix to the Bight 2008 report and are approximate (tabular data not currently available). The Bight 2008 effort included collecting and analyzing both reference and discharge receiving water samples. The Bight 2008 report showed the comparison between the reference 85th percentile threshold values and discharge samples (Schiff et al., 2011).

4.2.1 Metals

For total chromium, the Bight 2008 85th percentile threshold of reference conditions was 1.6 µg/L (revised by Bight 2013 data to 2.6 µg/L). Of the five ASBS 24 post-storm samples assessed for total chromium during Bight 2008, four had concentrations below the threshold (ranging from approximately 0.5 to 1.0 µg/L) and one was above the threshold (approximately 3.4 µg/L)(Schiff et al., 2011).

For total copper, the Bight 2008 85th percentile threshold was 2.2 µg/L (revised by Bight 2013 data to 1.9 µg/L). Of the three ASBS 24 post-storm samples assessed for total copper during Bight 2008, two had concentrations below the threshold (approximately 0.4 and 0.5 µg/L) and one was slightly above the threshold (approximately 2.3 µg/L)(Schiff et al., 2011).

For total nickel, the Bight 2008 85th percentile threshold was 1.5 µg/L (revised by Bight 2013 data to 2.2 µg/L). For the three ASBS 24 post-storm samples assessed during Bight 2008, two had concentrations below the threshold (approximately 0.5 and 0.7 µg/L) and one was above the threshold (approximately 4.2 µg/L)(Schiff et al., 2011).

For total zinc, the Bight 2008 85th percentile threshold was 8.6 µg/L (revised by Bight 2013 data to 19 µg/L). Of the five ASBS 24 post-storm samples assessed for total zinc during Bight 2008, three had concentrations below the threshold (ranging from 0 to approximately 2.1 µg/L) and two were above the threshold (approximately 10.5 and 11.0 µg/L)(Schiff et al., 2011).

Samples collected as part of the Bight 2008 efforts were not analyzed for mercury or selenium, and thus no Bight 85th percentile thresholds were established for these constituents.

4.2.2 Total Suspended Solids

For TSS, the Bight 2008 85th percentile threshold was 16.5 mg/L(revised by Bight 2013 data to 55.4 µg/). Of the five ASBS 24 post-storm samples assessed for TSS during the Bight 2008, two had concentrations below the threshold (approximately 8.0 and 10.0 µg/L) and three were above the threshold (ranging from approximately 50 to 130 µg/L)(Schiff et al., 2011).

4.2.3 Total PAHs

For total PAHs, the Bight 2008 85th percentile threshold was 19.6 ng/L (revised by Bight 2013 data to 12.5 ng/L). Of the four ASBS 24 post-storm samples assessed for total PAHs during the Bight 2008, all four samples had concentrations below the threshold (approximately 0, 5, 8, and 11 ng/L)(Schiff et al., 2011).

4.2.4 Organophosphorus Pesticides and Pyrethroids

Samples collected as part of the Bight 2008 efforts were not analyzed for organophosphorus pesticides or pyrethroids, and thus no Bight 85th percentile thresholds were established for these constituents.

5.0 OUTFALL ASSESSMENT OF POLLUTANT LOAD REDUCTION TARGETS

An assessment of the potential pollutant load reductions targets was performed to determine the magnitude of controls required to be implemented in order to enhance the water quality of the ASBS. The first step in the assessment process was to evaluate wet weather receiving water quality monitoring data in comparison to data for reference monitoring sites, in accordance with the flowchart provided as Attachment 1 to the General Exception, to determine if an exceedance of the natural water quality currently exists (see Section 4.0). This evaluation determined that an exceedance of natural water exists for three constituents at receiving water Site S02 and discussed in more detail in Section 4.0. Water quality results from outfall monitoring were evaluated for the applicable constituent to identify discharge locations that have a potential to be contributing to the exceedance of natural water quality. More specifically, the assessment evaluated where BMPs may be required to achieve outfall design storm discharge concentrations, on average, by either: 1) end-of-pipe concentrations below the Table B Instantaneous Maximum Water Quality Objectives (WQOs) in Chapter II of the Ocean Plan, or 2) achieving a 90% reduction in pollutant loading during storm events for the responsible applicant's total discharge. The Ocean Plan was updated subsequent to the General Exception adoption. The updated Ocean Plan now refers to Table B as Table 1 (formerly Table B), and this Plan utilized the updated table title.

5.1 Outfall Wet Weather Monitoring Results

The General Exception states that the ASBS Compliance Plan shall describe how the necessary pollutant reductions in storm water runoff will be achieved through prioritization of outfalls and implementation of BMPs to reduce end-of-pipe pollutant concentrations during a design storm to below either the Table 1 Instantaneous Maximum WQOs in Chapter II of the Ocean Plan or a 90% reduction in pollutant loading during storm events for the applicant's total discharge. For the constituents that are currently in exceedance of the natural water quality of the ASBS (mercury, selenium, and total PAHs), this draft ASBS Compliance Plan evaluates outfall discharges in comparison to the Table 1 Instantaneous Maximum WQOs as the pollutant load targets in order to be in compliance with the General Exception.

Chemistry results obtained from outfalls to ASBS 24 during the February 2013, March 2013, and February 2014 storm events are presented on Table 5-1 through Table 5-3, respectively. Site ASBS-008 was not added to the monitoring list until after the February 19, 2013, storm event, so no data were collected during the first monitoring event. Site ASBS-008 was inadvertently not monitored during the third storm event. Sites ASBS-013, ASBS-016, and ASBS-031 did not flow during the February 19, 2013, storm event, and Sites ASBS-013 and ASBS-031 did not flow during the March 8, 2013, storm event. Site ASBS-031 did not flow during the February 2014 storm event. Outfalls that were less than 36 inches in diameter were evaluated for oil and grease and TSS only, while outfalls that were 36 inches or greater in diameter were evaluated for ammonia, nitrate, oil and grease, TSS, total orthophosphate, total metals, PAHs, organophosphorus pesticides, and pyrethroids. Table 5-1 through Table 5-3

Table 5-3 include both PAHs (based on 13 constituents listed in the Ocean Plan) and total PAHs (based on the 25 constituents analyzed by the laboratory based on guidance from the Bight 2013 Committee). These tables also list the more commonly detected individual pyrethroids as well as the total pyrethroids.

Table 5-1. February 2013 Outfall Chemistry Results

Parameter	Units	CA Ocean Plan	001	002	003	004	005	008	011	013	016[1]	018	021	022	023	024	025	026	027	028[2]	029	030	031
		Instantaneous Maximum	2/19/2013	2/19/2013	2/19/2013	2/19/2013	2/19/2013	2/19/2013	2/19/2013	2/19/2013	2/19/2013	2/19/2013	2/19/2013	2/19/2013	2/19/2013	2/19/2013	2/19/2013	2/19/2013	2/19/2013	2/19/2013	2/19/2013	2/19/2013	2/19/2013
General Chemistry																							
Ammonia as N	mg/L	6			1.47		1.12	Not sampled		Not sampled	Not sampled		0.78	1	0.68					0.64			Not sampled
Nitrate as N	mg/L				10.15		5.57						4.48	8.24	12.45					7.02			
Oil & Grease	mg/L		1.3	1.4	1.6	4	1.6		<1			<1	<1	1.9	2.3	6	3.7	7	3.1	<1	<1	30.9	
Total Orthophosphate as P	mg/L				0.53		0.6						0.22	0.35	0.63					0.28			
Total Suspended Solids	mg/L		270.7	53.8	584	284	186.5		1.8			75.5	22.5	38.7	63.2	453	90.5	870	218	16.3	133	61.3	
Total Metals																							
Arsenic (As)	µg/L	80			2.129		1.664	Not sampled		Not sampled	Not sampled		1.15	0.949	2.231					0.876			Not sampled
Cadmium (Cd)	µg/L	10			0.3074		0.3482						0.0953	0.1168	0.201					0.269			
Chromium (Cr)	µg/L	20			10.1209		7.9002						1.393	3.1286	3.2046					1.8548			
Copper (Cu)	µg/L	30			63.557		30.469						11.434	84.928	266.162					13.136			
Lead (Pb)	µg/L	20			13.9921		5.8034						1.317	4.3272	4.8762					2.0076			
Mercury (Hg)	µg/L	0.4			0.1611		0.0505						<0.0012	<0.0012	<0.0012					<0.0012			
Nickel (Ni)	µg/L	50			11.5741		10.4739						2.7542	3.1307	7.007					5.2478			
Selenium (Se)	µg/L	150			0.794		0.102						0.138	0.151	0.355					0.435			
Silver (Ag)	µg/L	7			<0.01		<0.01						<0.01	<0.01	<0.01					<0.01			
Zinc (Zn)	µg/L	200			141.3834		128.8537						60.3801	135.3146	269.0515					38.9739			
Organophosphorus Pesticides																							
*All OP Pesticides	ng/L				ND		ND	N.S.		N.S.	N.S.		ND	ND	2868.9					ND			N.S.
Polynuclear Aromatic Hydrocarbons																							
Fluoranthene	ng/L				59.2		122	Not Sampled		Not Sampled	Not Sampled		26.9	70.9	101.2					<1			Not Sampled
PAHs[3]	ng/L				102		208.4						42	103.7	255.6					<1			
Total PAHs[4]	ng/L				161.2		341.4						68.9	174.6	380.2					6.1			
Pyrethroids																							
Bifenthrin	ng/L				700.8		<0.5	Not Sampled		Not Sampled	Not Sampled		<0.5	320.9	1184.5					<0.5			Not Sampled
Deltamethrin/Tralomethrin	ng/L				<0.5		<0.5						<0.5	<0.5	<0.5					<0.5			
Esfenvalerate	ng/L				152.4		<0.5						<0.5	<0.5	<0.5					<0.5			
All Other Pyrethroids	ng/L				29.3		ND						ND	ND	344.4					ND			
*Total Pyethroids	ng/L				882.5		ND						ND	320.9	1528.9					ND			

< - results less than the method detection limit (MDL).
ND - results less than the MDLs (multiple results)
Green fill- concentration is greater than California Ocean Plan Imax criteria
Note 1 - Site associated with Receiving Water Station S01
Note 2 - Site associated with Receiving Water Station S02
Note 3 - PAHs based on constituents listed in Ocean Plan
Note 4 - Total PAHs based on constituents listed in Bight 2013 Work Plan.

Table 5-2. March 2013 Outfall Chemistry Results

Parameter	Units	CA Ocean Plan	001	002	003	004	005	008	011	013	016[1]	018	021	022	023	024	025	026	027	028[2]	029	030	031
		Instantaneous Maximum	3/8/2013	3/8/2013	3/8/2013	3/7/2013	3/7/2013	3/8/2013	3/7/2013	3/7/2013	3/8/2013	3/8/2013	3/8/2013	3/7/2013	3/8/2013	3/8/2013	3/8/2013	3/7/2013	3/7/2013	3/8/2013	3/7/2013	3/7/2013	3/7/2013
General Chemistry																							
Ammonia as N	mg/L	6			2.1		4.75			Not Sampled	4.8		0.57	1.32	0.66					7.8			Not Sampled
Nitrate as N	mg/L				3.78		3.51				10.2		3.24	4.84	5.15					5.29			
Oil & Grease	mg/L		221.1	<1	1.1	83.4	<1	<1	<1		<1	<1	<1	<1	1.3	1.2	1.5	4.8	1.7	6.7	<1	1.2	
Total Orthophosphate as P	mg/L				0.5		0.34				0.79		0.51	0.16	0.51					0.75			
Total Suspended Solids	mg/L		531	52.7	315.7	17.5	37.1	115.4	<0.5		782	58.1	64.1	10.7	33	63.6	64.3	660	17.9	616	29.7	32.4	
Total Metals																							
Arsenic (As)	µg/L	80			2.505		1.43			Not Sampled	3.738		2.13	2.257	2.158					7.287			Not Sampled
Cadmium (Cd)	µg/L	10			0.6881		0.0848				1.2527		0.5355	0.0901	0.0767					10.9524			
Chromium (Cr)	µg/L	20			23.8781		2.5783				39.2081		7.1327	1.9708	1.8344					32.3596			
Copper (Cu)	µg/L	30			41.556		27.149				33.872		20.484	35.044	116.98					198.495			
Lead (Pb)	µg/L	20			19.8277		1.7097				10.1402		3.9416	1.0592	3.6519					46.2982			
Mercury (Hg)	µg/L	0.4			0.0238		0.0158				0.0236		0.0148	0.007J	<0.0012					0.0596			
Nickel (Ni)	µg/L	50			22.3039		4.5323				47.8272		10.479	2.0729	3.4917					77.0818			
Selenium (Se)	µg/L	150			0.363		0.115				0.176		0.076J	0.521	0.151					1.004			
Silver (Ag)	µg/L	7			<0.01		0.06				<0.01		0.08	0.06	0.04					0.06			
Zinc (Zn)	µg/L	200			142.7101		104.6536				125.2092		88.1959	41.841	157.6642					800.687			
Organophosphorus Pesticides																							
*All OP Pesticides	ng/L				ND		ND			N.S.	ND		ND	ND	4128.6					ND			N.S.
Polynuclear Aromatic Hydrocarbons																							
Fluoranthene	ng/L				199.3		29.4			Not Sampled	70		51.8	9.8	83.8					476			Not Sampled
PAHs[3]	ng/L				665.2		53				231.3		131.8	18.5	251.4					1145.6			
Total PAHs[4]	ng/L				1036.2		101.4				340.2		205.2	31.3	473.9					1754.2			
Pyrethroids																							
Bifenthrin	ng/L				214		<0.5			Not Sampled	<0.5		<0.5	74.6	167.5					203.9			Not Sampled
Deltamethrin/Tralomethrin	ng/L				<0.5		50.3				<0.5		<0.5	<0.5	<0.5					<0.5			
Esfenvalerate	ng/L				<0.5		<0.5				<0.5		<0.5	<0.5	<0.5					<0.5			
All Other Pyrethroids	ng/L				ND		37.8				ND		ND	ND	268.6					ND			
*Total Pyethroids	ng/L				214		88.1				ND		ND	74.6	436.1					203.9			

< - results less than the method detection limit (MDL).
ND - results less than the MDLs (multiple results)
Green fill- concentration is greater than California Ocean Plan Imax criteria
Note 1 - Site associated with Receiving Water Station S01
Note 2 - Site associated with Receiving Water Station S02
Note 3 - PAHs based on constituents listed in Ocean Plan
Note 4 - Total PAHs based on constituents listed in Bight 2013 Work Plan.

Table 5-3. February 2014 Outfall Chemistry Results

Parameter	Units	CA Ocean Plan	001	002	003	004	005	008	011	013	016[1]	018	021	022	023	024	025	026	027	028[2]	029	030	031	24-BB-02Z	24-BB-03Z
		Instantaneous Maximum	2/28/2014	2/28/2014	2/28/2014	2/28/2014	2/28/2014	2/28/2014	2/28/2014	2/28/2014	2/28/2014	2/28/2014	2/28/2014	2/28/2014	2/28/2014	2/28/2014	2/28/2014	2/28/2014	2/28/2014	2/28/2014	2/28/2014	2/28/2014	2/28/2014	2/28/2014	2/28/2014
General Chemistry																									
Ammonia as N	mg/L	6			4.95		0.37	Not Sampled			0.68		0.43	1.51	<0.02					0.21			Not Sampled		0.47
Nitrate as N	mg/L				0.63		0.54				0.72		0.86	1.53	24.54					0.27					0.2
Oil & Grease	mg/L		<1	<1	2.5	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	2.5	1.3	1J	<1	1.3		ND	ND
Total Orthophosphate as P	mg/L				1.08		0.2				0.86		0.83	0.84	0.94					0.27					0.34
Total Suspended Solids	mg/L		79.2	296	5095	593	497		70.4	119	803	55.3	148	7.9	4.8	27.5	18.2	103.2	78.8	40.3	1.9	42.6		82.8	393
Total Metals																									
Arsenic (As)	µg/L	80			9.083		1.792	Not Sampled			2.748		3.523	3.733	4.731					0.656			Not Sampled		2.598
Cadmium (Cd)	µg/L	10			3.8221		0.5467				1.4084		0.5483	0.1789	0.2771					0.1864					0.5776
Chromium (Cr)	µg/L	20			75.3533		20.632				23.607		5.9767	2.1554	1.7879					1.2621					22.7594
Copper (Cu)	µg/L	30			109.663		27.954				29.906		25.054	56.105	84.921					26.219					28.435
Lead (Pb)	µg/L	20			71.7821		6.1139				8.1312		5.7255	2.1098	0.5393					17.5522					16.3304
Mercury (Hg)	µg/L	0.4			<0.0012		<0.0012				<0.0012		<0.0012	<0.0012	<0.0012					<0.0012					<0.0012
Nickel (Ni)	µg/L	50			91.1114		25.8248				38.049		9.1185	4.7738	8.8064					2.9016					11.9473
Selenium (Se)	µg/L	150			0.331		0.221				0.226		0.319	1.22	5.101					0.334					0.099
Silver (Ag)	µg/L	7			0.17		0.08				0.1		0.07	0.21	0.06					0.01J					0.02
Zinc (Zn)	µg/L	200			454.8282		98.3671				151.1528		93.2702	97.0057	199.0364					87.6536					177.7661
Organophosphorus Pesticides																									
*All OP Pesticides	ng/L				ND		ND	N.S.			ND		ND	ND	ND					ND			N.S.		ND
Polynuclear Aromatic Hydrocarbons																									
Fluoranthene	ng/L				753.3		243	Not Sampled			92.6		105.8	14.2	612.6					204.7			Not Sampled		210.7
PAHs[3]	ng/L				7159.2		906.4				778		570.3	54.7	1982.1					812.2					1633.1
Total PAHs[4]	ng/L				9115.8		1341.8				1087.2		773.6	130.2	3195.6					1178.8					2187.2
Pyrethroids																									
Bifenthrin	ng/L				694.4		43.4	Not Sampled			5.4		80.3	16.9	188.7					1673.6			Not Sampled		31.6
Deltamethrin/Tralomethrin	ng/L				<0.5		<0.5				<0.5		<0.5	<0.5	<0.5					<0.5					<0.5
Esfenvalerate	ng/L				15.6		<0.5				<0.5		1.5J	0.6J	<0.5					<0.5					<0.5
All Other Pyrethroids	ng/L				3979.8		1.6				132.4		7.6	86.6	19.9					2.2					44.6
*Total Pyethroids	ng/L				4689.8		45				137.8		89.4	104.1	208.6					1675.8					76.2

< - results less than the method detection limit (MDL).
ND - results less than the MDLs (multiple results)
Green fill- concentration is greater than California Ocean Plan Imax criteria
Note 1 - Site associated with Receiving Water Station S01
Note 2 - Site associated with Receiving Water Station S02
Note 3 - PAHs based on constituents listed in Ocean Plan
Note 4 - Total PAHs based on constituents listed in Bight 2013 Work Plan.

The Ocean Plan Table 1 Instantaneous Maximum WQOs for mercury and selenium are 0.4 µg/L and 150 µg/L, respectively. Table 1 does not list Instantaneous Maximum WQOs for PAHs. This Plan focused on mercury and selenium in this assessment of pollutant load reduction targets. During the three monitored events the sampling results were all below these Ocean Plan Table 1 Instantaneous Maximum values. During the first storm monitored in 2013 (February 8, 2013), the highest measured values mercury and selenium were 0.16 µg/L and 0.79 µg/L, respectively, at ASBS-003. Outfall ASBS-028 had measured mercury and selenium concentrations of 0.06 µg/L and 1.0 µg/L, respectively, during the second monitored storm, which occurred in March 2013. During the third monitored storm, which occurred in February 2014, the measured selenium concentration at Outfall ASBS-023 was the highest value measured at 5.1 µg/L. All outfall samples collected and analyzed for mercury had results of non-detect during the third event. The summary of the highest measured values in comparison with the Ocean Plan Table 1 Instantaneous Maximum values as well as other Ocean Plan Table 1 limiting concentrations is provided on Table 5-4.

Table 5-4. Ocean Plan Comparison to Summary of Maximum Outfall Results

	Ocean Plan Table 1 Values (Receiving Water Mixing Zone)			Maximum Measured Value (in Outfall Prior to Mixing Zone)		
Parameter	6-Month Median	Daily Maximum	Instantaneous Maximum	February 2013, Event 1	March 2013, Event 2	February 2014, Event 3
Mercury	0.04	0.16	0.4	0.16	0.06	<0.0012
Selenium	15	60	150	0.79	1.0	5.1

The summary table of maximum outfall results values for mercury and selenium indicate that the pollutant loading storm water discharges from outfalls for these constituents is far below the Ocean Plan Table 1 Instantaneous Maximum values. The highest mercury value measured is equal to the Ocean Plan Table 1 Daily Maximum values. The highest selenium value measured is below the Ocean Plan Table 1 Instantaneous Maximum with over an order of magnitude difference between the two. The highest selenium value measured is also below the most limiting concentration of the Ocean Plan Table 1, which the 6-Month Median value. The measured values of mercury and selenium, besides those presented in the summary table above, were significantly less than the maximum measured.

Common major sources of mercury include scrap metal piles, deteriorating metal and paint, and airborne emissions from burning coal, oil or municipal waste (UWE, 1997). Selenium is a naturally occurring element that persists in soils and aquatic sediments and may be leached from sediments as a result of modifications in the natural hydrologic regime (LARWQCB, 2002).

5.2 Outfall Assessment Conclusions

Following the guidance found in the Special Protections an assessment of outfalls was performed to determine where structural controls may be required to achieve the specified pollutant loading limitations on point source discharges into ASBS 24. Preceding the outfall assessment was the receiving water assessment that indicated, also based on the guidance found in the Special Protections, that there are exceedances of natural water in the receiving water during wet weather events for mercury, selenium, and total PAHs where samples were available for this assessment. The outfall assessment included comparing the monitoring data for mercury and selenium to