

## **APPENDIX I. JURISDICTIONAL STRATEGIES**

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Jurisdictional strategies are required as part of the Water Quality Improvement Plan (WQIP), under Provision B of the San Diego Regional Water Quality Control Board (Regional Board) National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer System (MS4) Draining the Watersheds Within the San Diego Region, Order Number R9-2013-0001 (Municipal Permit). The Responsible Parties (RPs) have identified water quality improvement strategies that may be implemented to address the Highest Priority Conditions or Focused Priority Conditions. The strategies were selected on the basis of their ability to effectively and efficiently eliminate non-storm water discharges to the MS4, reduce pollutants in storm water discharges from the MS4 to the maximum extent practicable (MEP), and achieve the interim and final numeric goals identified in the San Diego Bay Watershed Management Area (WMA) WQIP.

In addition to the strategies and schedules presented in Tables I-1 through I-10, the jurisdictions implement baseline jurisdictional programs. Nonstructural and structural strategies selected by each RP to address Priority Conditions are presented in this document. RP-specific tables for implementation of the selected strategies that outline the method, cost, and additional stakeholder participation are presented in the sections below.

### **I.1 SAN DIEGO REGIONAL AIRPORT AUTHORITY STRATEGIES**

The San Diego County Regional Airport Authority (Airport Authority) has selected strategies to meet the water quality goals for copper and zinc in wet weather discharges to best suit the unique characteristics of the Airport Authority. For example, the Airport is almost entirely paved, and space available for many traditional BMPs is severely limited. The Airport Authority continues to implement its core Jurisdictional Runoff Management Plan (JRMP), which includes many strategies that have positive impacts on the water quality of MS4 discharges. To make progress toward its identified goals, the Airport Authority enhances some existing JRMP strategies and implements new strategies that concentrate on the Focused Priority Conditions.

San Diego International Airport (SDIA) was one of the first major U.S. airports to implement a sustainability policy and, as part of the airport expansion, included structural BMPs to address water quality. The project was designed to achieve Leadership in Energy and Environmental Design (LEED) Silver certification from the U.S. Green Building Council. The project included Best Management Practices (BMPs) such as permeable pavement, bioretention swales, and modular wetland treatment units. Future projects are to continue to consider storm water and water quality improvements in design and implementation, where feasible.

The Airport Authority has identified the jurisdictional strategies, presented in Table I.1.1, to assist in meeting the WQIP goals. Table I.1.2 shows the elements of the Airport Authority's JRMP that are targeted toward addressing the Focused Priority Condition. Strategies and implementation schedules were identified using best information available on efficiency, effectiveness, and level of effort estimated to achieve compliance with numeric goals. The adaptive management process provides the framework to evaluate progress toward meeting the goals and allows for modification of strategies. As strategies are modified, the WQIP is to be updated. The implementation of each strategy is contingent upon annual budget approvals and funding availability.

**Table I.1.1 Airport Authority  
 Jurisdictional Strategies**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed						Source (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))	
						Bacteria	Nutrients	Metals <sup>1</sup>	Trash	Sediment	Flow			Habitat/ Wildlife
<b>JRMP (E.2 – E.7) Strategies (E.3.b.(1)(a))</b>														
<b>E.3 Development Planning</b>														
<b>All Development Projects</b>														
AA-1	For all development projects, administer a program to ensure implementation of source control BMPs to minimize pollutant generation at each project and implement Low Impact Development (LID) BMPs to maintain or restore hydrology of the area, where applicable and feasible.	Refer to SWMP/JRMP Sections 4, 6 & 7 and Appendix B, Sustainability Policy, and LEED. All development projects, once complete, will be inspected monthly. Annual inspections include examination of all structural BMPs at a project to verify that each structural BMP is working, being maintained properly, and is in compliance with all applicable Authority codes, plans and permits. Funding mechanisms for project construction and long-term maintenance is from the rolling five year capital improvement program.	Jurisdictional	Fiscal Year (FY)16	Continuous-Ongoing	X	X	X	X	X	X	X	Development	Environmental Affairs Department (EAD), Airport Design and Construction Department (ADC), Facilities Development Department (FDD)
<b>Priority Development Projects (PDPs)</b>														
AA-2	For PDPs, administer a program requiring implementation of structural BMPs to control pollutants. Includes confirmation of design, construction, and maintenance of PDP structural BMPs.	Refer to SWMP/JRMP Sections 4, 6 & 7 and Appendix B, Sustainability Policy, and LEED. Annual inspections include examination of all structural BMPs at a project to verify that each structural BMP is working, being maintained properly, and is in compliance with all applicable Authority codes, plans and permits. Funding mechanisms for project construction and long-term maintenance is from the rolling five year capital improvement program.	Jurisdictional	FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Development	EAD, ADC, FDD
<b>E.4 Construction Management</b>														
AA-3	Administer a program to oversee implementation of BMPs during the construction phase of land development. Includes inspections at an appropriate frequency and enforcement of requirements.	Refer to SWMP/JRMP Section 5. Inspections performed by the Authority provide verification that each site is in conformance with the SWMP/JRMP. All inspections are performed weekly. Please see Table I.1.2 for details on updated minimum BMPs that will be implemented to address sources causing or contributing to the FPWQC. Funding mechanisms for project construction and long-term maintenance is from the rolling five year capital improvement program.	Jurisdictional	Prior to FY16	Continuous-Ongoing			X		X	X		Construction	EAD, ADC, FDD

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals <sup>1</sup>	Trash	Sediment	Flow	Habitat/ Wildlife		
<b>E.5 Existing Development</b>														
<b>Commercial, Industrial, and Municipal Facilities and Areas</b>														
AA-4	Administer and enforce a program to require implementation of minimum BMPs for existing development (commercial, industrial, and municipal) that are specific to the facility, pollutant-generating activities (PGAs), and areas, as appropriate. Includes inspection of existing development at appropriate frequencies and using appropriate methods.	Refer to SWMP/JRMP Sections 6 and 7. All industrial, municipal, and commercial areas are inspected monthly. Please see Table I.1.2 for details on updated minimum BMPs that will be implemented to address sources causing or contributing to the FPWQC. Funding is from the EAD budget.	Jurisdictional	FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Commercial, Industrial, and Municipal Facilities and Areas	EAD
	1. Update minimum BMPs for existing commercial and industrial development.	Refer to SWMP/JRMP Appendix B. Please see Table I.1.2 for details on updated minimum BMPs that will be implemented to address sources causing or contributing to the FPWQC. Funding is from the EAD budget.	Jurisdictional	FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Commercial and Industrial Facilities and Areas	EAD
	2. Design, implement, and enforce pollutant-generating-area-based and PGA-based inspections.	Refer to SWMP/JRMP Sections 6 and 7. Please see Table I.1.2 for details on updated minimum BMPs that will be implemented to address sources causing or contributing to the FPWQC. Funding is from the EAD budget.	Jurisdictional	FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Industrial – Tenant Operational Areas; Industrial – Airport Operational Areas; and Ground Transportation – Parking Lots/Roads	EAD
	3. Increased inspection frequency for highest potential pollutant generating areas and PGAs.	Funding will be from the EAD budget.	Jurisdictional	FY18	Continuous-Ongoing	X	X	X	X	X	X	X	Industrial – Tenant Operational Areas; Industrial – Airport Operational Areas; and Ground Transportation – Parking Lots/Roads	EAD

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						Bacteria	Nutrients	Metals <sup>1</sup>	Trash	Sediment	Flow	Habitat/ Wildlife		
<b>MS4 Infrastructure</b>														
AA-5	Implement operation and maintenance activities (inspection and cleaning) for MS4 and related structures (catch basins, storm drain inlets, detention basins, etc.) for water quality improvement.	Refer to SWMP/JRMP Section 6. In order to limit inflow of pollutants and reduce pollutant loads, inspection and maintenance of the MS4 is conducted quarterly. Funding is from the EAD, Facilities Management Department (FMD), and FDD budgets.	Jurisdictional	FY16	Continuous-Ongoing	X	X	X	X	X		MS4 Infrastructure	EAD/FMD/FDD	
	1. Determine and implement optimal catch basin cleaning locations and frequencies to maximize pollutant removal.		Jurisdictional	FY17	Continuous-Ongoing	X	X	X	X	X		MS4 Infrastructure	FMD/EAD	
<b>Hardscapes (Runway, Taxiways, Ramps, Roads, Streets, and Parking Lots)</b>														
AA-6	Implement operation and maintenance activities for runway, taxiways, ramp areas, roadways, and parking lots.	Refer to SWMP/JRMP Sections 6 and 7, and Appendix B. Please see Table I.1.2 for details on updated minimum BMPs that will be implemented to address sources causing or contributing to the FPWQC. Funding is from the FMD and EAD budgets.	Jurisdictional	FY16	Continuous-Ongoing	X	X	X	X	X		Industrial – Tenant Operational Areas; Industrial – Airport Operational Areas; and Ground Transportation – Parking Lots/Roads	FMD/EAD	
	1. Determine and implement optimal street sweeping locations and frequencies on runway, taxiways, ramp areas, roads, and parking lots to maximize pollutant removal.	Refer to SWMP/JRMP Sections 6 and 7. The Authority will increase sweeping in sub-basins 1, 3 and 5, to address apparent sources of higher concentrations of copper and zinc (the FPWQC).	Jurisdictional	FY17	Continuous-Ongoing	X	X	X	X	X		Industrial – Tenant Operational Areas; Industrial – Airport Operational Areas; and Ground Transportation – Parking Lots/Roads	FMD/EAD	

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals <sup>1</sup>	Trash	Sediment	Flow	Habitat/ Wildlife		
	<b>Pesticides, Herbicides, and Fertilizer BMP Program</b>													
AA-7	Require implementation of BMPs in an integrated pest management (IPM) program to address application, storage, and disposal of pesticides, herbicides, and fertilizers in commercial, industrial, and municipal areas. Includes education, permits, and certifications.	Refer to SWMP/JRMP Sections 6, 7 and 9, and Appendix B. All storage and disposal areas are inspected monthly. Funding is from the FMD and EAD budgets.	Jurisdictional	FY16	Continuous-Ongoing	X	X					Commercial, Industrial, and Municipal Facilities and Areas	FMD/EAD	
	<b>Retrofit and Rehabilitation in Areas of Existing Development</b>													
AA-8	Identify candidate areas of existing development appropriate for retrofitting projects and facilitate the implementation of such projects.	Refer to SWMP/JRMP Sections 4 and 6 and Appendix C. The Authority will identify those areas of existing development that are candidates for retrofitting where feasible, to reduce pollutants and/or stressors that contribute to the FPWQC. If retrofitting projects are deemed infeasible, the Authority will collaborate and cooperate with other Responsible Parties in the WMA to identify, develop, and implement regional retrofitting projects adjacent to and/or downstream from the Authority's areas of existing development. Funding mechanisms for project construction and long-term maintenance is from the rolling five year capital improvement program.	Jurisdictional	FY16	Continuous-Ongoing	X	X	X	X	X	X	Commercial, Industrial, and Municipal Facilities and Areas	EAD, FDD	
	<b>E.2 Illicit Discharge, Detection, and Elimination (IDDE) Program</b>													
AA-9	Implement Illicit Discharge, Detection, and Elimination (IDDE) Program per the SWMP/JRMP. Requirements include: maintaining an MS4 map, using municipal personnel, tenants, contractors and vendors to identify and report illicit discharges, maintaining a hotline for public reporting of illicit discharges, monitoring MS4 outfalls, and investigating and addressing any illicit discharges.	Refer to SWMP/JRMP Sections 3 and 7, and Appendix D. The Authority visually inspects 2 major MS4 outfalls and all sampling locations twice a year during dry weather conditions, as well as inspecting all drainage basins monthly for authorized and unauthorized non-stormwater discharges. Please see Table I.1.2 for details on updated minimum BMPs that will be implemented to address sources causing or contributing to the FPWQC.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	Commercial, Industrial, and Municipal Facilities and Areas	EAD	
	<b>E.7 Public Education and Participation (B.3.b.(1)(a)(iii))</b>													
AA-10	Implement a public education and participation program to promote and encourage	Refer to WQIP Section 4.4.2 and SWMP/JRMP Section 9.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	Industrial – Tenant Operational Areas;	EAD	

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	development of programs, management practices, and behaviors that reduce the discharge of pollutants in storm water prioritized by high-risk behaviors, pollutants of concern, and target audiences.												Industrial – Airport Operational Areas; and Ground Transportation – Parking Lots/Roads	
AA-11	Provide municipal staff and tenant training. Highlight goals and strategies of WQIP, in particular copper and zinc as FPWQC for the Authority, sources and BMPs.	Refer to SWMP/JRMP Section 9.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Industrial – Tenant Operational Areas; Industrial – Airport Operational Areas; and Ground Transportation – Parking Lots/Roads	EAD
<b>E.6 Enforcement Response Plan</b>														
AA-12	Implement escalating enforcement responses to compel compliance with statutes, ordinances, permits, contracts, orders, and other requirements for illicit discharge detection and elimination (IDDE), development planning, construction management, and existing development in the Enforcement Response Plan.	Refer to SWMP/JRMP Sections 2, 3, 4, 5, 6, and 7. Escalated enforcement will include, when applicable, highlighting sources of any copper and zinc issues during inspections and during enforcement actions, as a reminder of the Authority's FPWQC, and the requirement, where appropriate, to undergo additional training on copper and zinc as water quality issues.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Commercial, Industrial, and Municipal Facilities and Areas	EAD
<b>Non-JRMP Strategies (Optional Strategies, B.3.b.(1)(b))</b>														
<b>Nonstructural</b>														
AA-13	Determine and implement optimal runway rubber removal locations and frequencies to maximize pollutant removal in Drainage Basins 1, 3 and 5.	This strategy may be implemented at any time at the Authority's discretion if the following triggers are met: 1) increased street sweeping in ramp/runway areas does not result in lower concentrations and loads of the FPWQC, 2) funding to address MS4 discharges is identified and secured, 3) staff resources are identified and secured, and 4) consensus and community support has been achieved. All budgets are contingent upon approval by the Authority Board.	Optional	FY17	Continuous-Ongoing			X	X	X			Industrial – Airport Operational Areas	EAD/FMD
AA-14	Determine and implement potential enhancements to runway rubber removal operations and equipment.	This strategy may be implemented at any time at the Authority's discretion if the following triggers are met: 1) increased street sweeping in ramp/runway areas	Optional	FY18	Continuous-Ongoing			X	X	X			Industrial – Airport Operational Areas	EAD/FMD

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						Bacteria	Nutrients	Metals <sup>1</sup>	Trash	Sediment	Flow	Habitat/ Wildlife		
		does not result in lower concentrations and loads of the FPWQC, 2) funding to address MS4 discharges is identified and secured, 3) staff resources are identified and secured, and 4) consensus and community support has been achieved. All budgets are contingent upon approval by the Authority Board.												
AA-15	Investigation and research of emerging BMP technology.	The Authority periodically conducts literature reviews, communication with other municipalities, researchers and vendors outside of the Authority, and pilot studies of new or emerging BMP technologies, with the goal of updating BMPs available and feasible for reducing pollutant loads from development and redevelopment sites. Funding and resources will be sought for FY2016. Funding for future fiscal years is contingent on annual budget approval by Authority Board.	Optional	Prior to FY16	As needed	X	X	X	X	X	X	Industrial – Tenant Operational Areas; Industrial – Airport Operational Areas; and Ground Transportation – Parking Lots/Roads	EAD/FDD	
AA-16	As opportunities arise and funding sources are identified, protect areas that are functioning naturally by avoiding impervious development and degradation on unpaved open space areas.	This strategy may be implemented at any time at the Authority's discretion if the following triggers are met: 1) proposed project includes naturally functioning area, 2) funding to address MS4 discharges is identified and secured, 3) staff resources are identified and secured, and 4) consensus and community support has been achieved. All budgets are contingent upon approval by the Authority Board.	Optional	Triggered	TBD	X	X	X	X	X	X	Industrial – Tenant Operational Areas; Industrial – Airport Operational Areas; and Ground Transportation – Parking Lots/Roads	EAD/FDD	
AA-17	Industrial BMP: Capture and Reuse of Air Conditioning Condensate	The existing Capture and Reuse of Air Conditioning Condensate program will continue for industrial facilities for water collection, conservation, and reuse using drums to collect the condensate, and final use of the water for power washing of sidewalks. This practice does not incur additional funds and is hoped to save costs by conserving water use.	Optional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	Industrial – Tenant Operational Areas	EAD/FMD/Tenants	

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						Bacteria	Nutrients	Metals <sup>1</sup>	Trash	Sediment	Flow		
AA-18	Implement source reduction initiatives.	Reduce FPWQC concentrations and loads by requiring Authority departments and tenants to replace vehicle and aircraft brake pads with copper-free brake pads. This strategy may be implemented at any time at the Authority's discretion if the following triggers are met: 1) funding is identified and secured, 2) technology is available and cost-effective, 3) consensus and community support has been achieved, and 4) interim and/or final goals have not been met. All Authority budgets are contingent upon approval by the Authority Board.	Optional	FY18+			X					Industrial – Tenant Operational Areas; Industrial – Airport Operational Areas; and Ground Transportation – Parking Lots/Roads	EAD/FMD/Tenants
	1. Replace Authority-owned vehicle brake pads with copper-free brake pads as they become commercially available.		Optional	FY18+	One Time			X				Municipal Facilities and Areas	EAD/FMD/Tenants
	2. Require replacement of tenant-owned vehicle brake pads with copper-free brake pads as they become commercially available.		Optional	FY18+	One Time Per Tenant			X				Commercial and Industrial Areas	EAD/Tenants
	3. Require use of maintenance-free, leak-proof batteries for electric vehicles as available.		Optional	FY18+	Continuous-Ongoing			X				Industrial – Tenant Operational Areas; and Industrial – Airport Operational Areas	EAD/FMD/Tenants
<b>Structural</b>													
<b>Green Infrastructure</b>													
AA-19	Since 2013, approximately 6 acres of permeable surface have been installed at the airport.	Funding is from the rolling five year capital improvement program, which is contingent on budget approval by Authority Board.	Optional	Prior to FY16	Continuous-Ongoing	X	X	X			X	Industrial – Airport Operational Areas; and Ground Transportation – Parking Lots/Roads	EAD/FDD

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals <sup>1</sup>	Trash	Sediment	Flow	Habitat/ Wildlife		
AA-20	Implement runoff water capture and reuse projects and facilitate the implementation of such projects.	Refer to Sustainability Policy and Draft Master Drainage Plan/Water Reuse Plan. Currently, the Authority is conducting workshops to investigate water capture and reuse opportunities.	Optional	FY18	Continuous-Ongoing	X	X	X	X	X	X	Commercial, Industrial, and Municipal Facilities and Areas	EAD/FDD	
AA-21	Phase in advanced BMPs (as defined in Industrial General Permit (IGP) i.e., shelters/structures, LID BMPs, TCBMPs and other BMPs) in high priority areas (e.g., runway, taxiways, ramps: sub basins 1, 3 & 5;).	Reduce FPWQC concentrations and loads by requiring Authority departments and tenants to phase in advanced BMPs. This strategy may be implemented at any time at the Authority's discretion if the following triggers are met: 1) funding is identified and secured, 2) technology is available and cost-effective, 3) consensus and community support has been achieved, and 4) interim and/or final goals have not been met. All Authority budgets are contingent upon approval by the Authority Board.	Optional	FY17 or Trigger	Continuous-Ongoing	X	X	X	X	X	X	Industrial – Tenant Operational Areas; and Industrial – Airport Operational Areas	FDD/EAD	
<b>Multiuse Treatment Area</b>														
<b>Infiltration and Detention Basins</b>														
AA-22	Since 2013, approximately 2 acres of bioswales have been installed as part of the airport Terminal 2 Expansion Project and other improvement projects.	Future developments will consider bioswales and other LID BMPs per final adopted BMP Design Manual and Authority codes and rules/regulations. This strategy may be implemented at any time at the Authority's discretion if the following triggers are met: 1) funding is identified and secured, 2) consensus and community support has been achieved, and 3) interim and/or final goals have not been met. All Authority budgets are contingent upon approval by the Authority Board.	Optional	Prior to FY16	Continuous-Ongoing	X	X	X		X	X	Ground Transportation – Parking Lots/Roads	ADC/FDD/EAD	
AA-23	1.25 acres of bioretention swales being constructed as part of the Rental Car Center.	Future developments will consider bioretention and LID BMPs per final adopted BMP Design Manual and Authority codes and rules/regulations. This strategy may be implemented at any time at the Authority's discretion if the following triggers are met: 1) funding is identified and secured, 2) consensus and community support has been achieved, and 3) interim and/or final goals have not been met. All Authority budgets are contingent upon approval by the Authority Board.	Optional	FY17	Continuous-Ongoing	X	X	X		X	X	Ground Transportation – Parking Lots/Roads	EAD/ADC	
<b>Stream, Channel and Habitat Rehabilitation Projects (B.3.b.(1)(b)(iii))</b>														

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						Bacteria	Nutrients	Metals 1	Trash	Sediment	Flow			Habitat/ Wildlife
AA-24	Habitat rehabilitation projects, as necessary and appropriate, in the Navy Boat Channel, Convair Lagoon, or Laurel-Hawthorne Embayment portions of San Diego Bay	This strategy may be triggered as 1) Investigative Orders or other regulatory orders/permits are issued, 2) partners have been identified and collaborative agreements have been developed, 3) funding to address MS4 discharges is identified and secured, 4) habitat rehabilitation is required and projects have been identified and designed, 5) staff resources are identified and secured, and 6) permits required by regulatory agencies are secured. The following resources, funds, and steps are needed to implement this strategy if the above triggers are met or at the Authority's discretion: 1) Obtain Authority Board approval of Capital Improvement Projects budget 2) Assign budget 3) Initiate preliminary engineering to narrow project scope 4) Hire design consultant to develop detailed construction plans and construction cost estimates 5) Complete construction contractor bid and award process for construction phase 6) Construct project (project timing and construction costs are TBD and are based on size of the project). 7) Operation and maintenance will be in perpetuity. Funds and staff resources for this function will be approved by Authority Board.	Optional	Triggered	One Time			X				X	Variable	EAD/FDD
<b>Water Quality Improvement BMPs</b>														
<b>Proprietary BMPs</b>														
AA-25	SANPark PacHwy paid public parking lot; North Side Interior Road; Terminal Link Road; Rental Car Center (RCC); RCC Bus Parking Facility; Employee Parking Lot 6 Expansion; Taxicab Hold Lot; Terminal 2 Parking Plaza.	Since 2013, the following proprietary TC BMPs have been installed at the airport: 12 modular wetland treatment units, 6 high-rate media filters, and 4 hydrodynamic separators. Proprietary TC BMPs are currently included in the construction plans for the facilities approved for construction in 2015 and 2016.	Optional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X		Industrial – Tenant Operational Areas; and Ground Transportation – Parking Lots/Roads	FDD/EAD
<b>WMA Strategies (Optional Strategies, B.3.b.(2))</b>														

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals <sup>1</sup>	Trash	Sediment	Flow	Habitat/ Wildlife		
AA-26	Offsite Alternative Compliance Option (WMAA)	The WMAA provides alternative compliance methods in lieu of meeting structural BMP design standards on the project site. The San Diego County Copermittees have collectively funded and provided guidance for development of a regional WMAA. Copermittees compiled a list of candidate projects that consider the numeric goals of the WMAs as well as projects previously identified in JRMPs and other regulatory documents. This strategy may be implemented at the Authority's discretion if the following triggers are met: 1) funding to address MS4 discharges is identified and secured, 2) staff resources are identified and secured, 3) consensus and community support has been achieved, and 4) interim/final goals are not met. Funding for future fiscal years is contingent on budget approval by Authority Board.	Optional	Prior to FY16	Continuous - Ongoing	X	X	X	X	X	X	X	Variable	FDD/EAD, Copermittees
AA-27	Participate in Reference Watershed Study	The San Diego Regional Reference Stream Study as currently being conducted by the Southern California Coastal Water Research Project. The study will develop numeric targets that account for "natural sources" to establish the concentrations or loads from streams in a minimally disturbed or "reference" condition.	Optional	Prior to FY16	Continuous – Ongoing	X	X	X	X	X	X	X	Variable	EAD, Copermittees

- Notes:
1. Metals, and in particular, copper and zinc, are the Airport Authority's Focused Priority Water Quality Condition (FPWQC).
  2. Orange-shaded cell in "Pollutants Addressed" column indicates FPWQC for the Airport Authority.
  3. Orange-shaded cell in "Source" column indicates FPWQC sources for the Airport Authority.

**Table I.1.2. Airport Authority  
 Minimum Best Management Practices**

No.	BMP Title*	Pollutant or Condition Addressed							
		Bacteria	Nutrients	Metals	Trash	Sediment	Dry Weather Flow	Oil & Grease	Organics
<b>Non-Storm Water Management</b>									
SC01-02	Provide the appropriate level of employee, tenant and public training or education in non-storm water discharge management, i.e., spill response and prevention, non-storm water pollution prevention, and hazardous materials management.	X	X	X	X	X	X	X	X
SC01-03	Limit the availability of outdoor water supplies (e.g. hose bibs, faucets) and post with appropriate use signs to discourage uses that may pollute the storm drain system/receiving water.	X	X	X	X	X	X	X	X
SC01-07	Direct air conditioning or refrigerator condensation to landscaping, porous surface , into the sanitary sewer, or for reuse.			X			X	X	X
<b>Equipment Operations and Maintenance Areas</b>									
SC02A-01	Equipment operations and maintenance areas should not be located directly in the path of storm drains.			X	X		X	X	X
SC02A-02	Perform equipment operations and maintenance in designated areas with overhead cover for pollutant sources and/or activity areas.			X	X		X	X	X
SC02B-01	Employees are trained in safe vehicle and equipment operations and maintenance.			X				X	X
SC02B-02	Aircraft, vehicle, and equipment maintenance areas should not be located directly in the path of storm drains.			X	X		X	X	X
SC02B-03	Perform maintenance of aircraft, ground vehicles and equipment in designated areas that are either indoors or are covered, bermed, enclosed, or sloped/positioned away from the MS4.			X	X		X	X	X
SC02B-04	Perform regular equipment inspection and testing.			X			X	X	X
SC02B-05	Inspect aircraft, vehicles and equipment on a regular basis for fluid leaks. Place drip pans under leaks as needed.			X			X	X	X
SC02B-06	Maintain aircraft, vehicles and equipment in good condition to prevent or correct any leakage of oil or other fluids.			X			X	X	X
SC02B-10	Store mechanical parts, equipment and vehicles awaiting repair under cover and away from storm drains.			X	X		X	X	X
SC02B-13	Properly dispose of obsolete and inoperable vehicles and equipment.			X	X				
SC02C-01	Do not overcharge batteries in electric vehicles.			X			X		
SC02C-02	Park electric vehicles in cool and dry areas (e.g. shade under building) when not in use.)			X					
SC02C-03	Use acid resistant drip pans sprinkled with battery acid neutralizing agent (e.g. lime or baking soda) when filling or cleaning electric vehicle batteries and dispose of waste properly.			X			X		

No.	BMP Title*	Pollutant or Condition Addressed							
		Bacteria	Nutrients	Metals	Trash	Sediment	Dry Weather Flow	Oil & Grease	Organics
SC02C-05	Adequately recover spill response material from area after use and dispose of them in an appropriate manner.			X	X				
SC02C-06	Avoid overfilling electric vehicle batteries.			X			X		
SC02C-07	Do not fill batteries or perform electric vehicle maintenance during rain events.			X					
SC02C-08	Store batteries inside in a cool and dry place if possible. If batteries are stored outside, store in a non-reactive container with a cover.			X			X		
SC02C-09	Clean battery case and terminals regularly or when there is a buildup of corrosion with a rag dampened with a solution of water and battery acid neutralizing agent. Capture any wastewater to be treated as hazardous waste.			X					
SC02C-10	Apply petroleum jelly or grease on battery terminals to slow down corrosion process.			X					
<b>Fueling</b>									
SC03-01	Perform aircraft, ground vehicle and equipment fueling in the designated areas that are covered, bermed, enclosed, or sloped/positioned away from the MS4.			X			X	X	X
SC03-02	Fueling areas should not be located directly in the path of storm drains.			X			X	X	X
SC03-03	Label, regularly inspect and keep in good condition all tanks, piping and valves.			X			X	X	X
SC03-05	Regularly inspect fueling areas.			X			X	X	X
SC03-06	Monitor major fueling operations.			X			X	X	X
SC03-07	Use secondary containment or cover when transferring fuel from a tanker truck to a fuel tank.			X			X	X	X
SC03-08	Use leak detection, overfill protection and spill prevention devices for tanks and piping.			X			X	X	X
SC03-09	Use automatic shut-off mechanisms for fuel tankers and hose connections.			X			X	X	X
SC03-10	Do not top off fuel tanks			X			X	X	X
<b>Vehicle and Equipment Cleaning</b>									
SC04-01	Keep vehicles, equipment, and washing areas clean and free of waste.	X	X	X		X	X	X	X
SC04-02	Use dry washing and surface preparation techniques where feasible.			X			X	X	X
SC04-03	Wash areas should not be located directly in the path of storm drains.			X		X	X	X	X
SC04-04	Use pigs and cover mats to cover all catch basins in the surrounding area to contain the wash water during washing activities.			X		X	X	X	X
SC04-05	Perform all washing activities in designated areas that capture, filter, and recycle water (e.g., at new Wash Bay Facility), or use reclaimed water and divert was water to a structural treatment control BMP, sanitary sewer or dead end sump with pump.			X		X	X	X	X
SC04-06	Perform routine visual observations of washing activities and inspect nearby storm drains to detect and prevent discharges from cleaning activities.			X		X	X	X	X

No.	BMP Title*	Pollutant or Condition Addressed							
		Bacteria	Nutrients	Metals	Trash	Sediment	Dry Weather Flow	Oil & Grease	Organics
SC04-07	Remove all excess materials such as drippings and residue by using vacuum methods. Properly dispose of all waste materials.			X		X	X	X	X
<b>Outdoor Loading/Unloading</b>									
SC06-04	Equipment used for loading and unloading should be checked on a regular basis for leaks.	X	X	X			X	X	X
SC06-05	Use drip pans or other containment measures under hoses.	X	X	X	X		X	X	X
SC06-06	Keep loading and unloading areas free of spills and debris by containing and absorbing leaks during transfers and spillage from hose disconnections or cargo pallets; dispose of residue or debris properly.	X	X	X	X		X	X	X
<b>Outdoor Material Storage</b>									
SC07-02	Outdoor material storage areas should have overhead cover and secondary containment.	X	X	X	X	X	X	X	X
SC07-03	Outdoor material storage areas should be prevented from contacting stormwater run-on and run-off (e.g. by the use of berms, wood pallets etc).	X	X	X	X	X	X	X	X
SC07-07	Regular inspections should be performed on tanks, containers, and berms to check for corrosion, structural failure, loose fittings, poor welds, leaks, etc. Repairs or replacements should be performed as needed.	X	X	X	X	X	X	X	X
<b>Waste Handling and Disposal</b>									
SC08-03	Designate waste/recycling areas with restricted access.	X	X	X	X	X	X	X	X
SC08-04	Do not locate waste/recycling areas directly in the path of storm drains.	X	X	X	X	X	X	X	X
SC08-05	Provide secondary containment and cover for wastes.	X	X	X	X	X	X	X	X
SC08-06	Wastes that are not contained or covered are prevented from contacting storm water and run-on and run-off by the use of berms.	X	X	X	X	X	X	X	X
SC08-09	Train all employees in the proper handling and disposal of waste materials.	X	X	X	X	X	X	X	X
<b>Building and Grounds Maintenance</b>									
SC09-04	Use temporary BMPs such as portable booms and vacuum trucks to contain water from outdoor building or structure washdown activities. Use reclaimed water, where possible, and collect and properly dispose of all waste water through a permitted connection to the sanitary sewer.			X		X	X	X	X
SC09-06	Remove temporary stockpiled materials at the end of the day or place away from watercourses and drainage inlets, and berm and cover stockpiles to prevent material releases to the storm drain.		X	X		X			
SC09-07	Clean pavement or sidewalk (using dry methods or reclaimed water) of any residual materials or spills before applying irrigation water, and capture and properly dispose of any waste water.	X	X	X		X	X	X	X
<b>Training</b>									

No.	BMP Title*	Pollutant or Condition Addressed							
		Bacteria	Nutrients	Metals	Trash	Sediment	Dry Weather Flow	Oil & Grease	Organics
SC10-02	Train Authority and tenant employees and contractors in storm water pollution prevention education covering all storm water issues, implementation and effectiveness of BMPs, spill prevention and cleanup, hazardous materials management, right-to-know awareness, and SWMP or SWPPP implementation.	X	X	X	X	X	X	X	X
SC10-03	Implement additional training programs for relevant Authority and tenant employees and contractors covering any Spill Plan implementation, the prohibition on cross-connections between sanitary sewers and storm drains, and contractor responsibility to comply with adopted BMPs.	X	X	X	X	X	X	X	X
<b>Outdoor Washdown/Sweeping/Ramp Scrubbing</b>									
SC12-01	Sweeping and scrubbing equipment should be regularly inspected and maintained to ensure effectiveness at removing pollutants and to avoid leaks.		X	X	X	X	X	X	X
SC12-02	Roads, ramp areas, apron areas, and, if feasible, runway/taxiway areas should be swept on a regular basis.			X	X	X			
SC12-03	Perform sweeping during dry weather using dry sweeping techniques where feasible.			X	X	X			
SC12-04	Sweepers should be operated at manufacturer-recommended optimal speeds.			X	X	X			
SC12-05	Debris and sediment from sweeping should be disposed of properly.			X	X	X			
SC12-06	Berm outdoor washdown areas to contain the wash water and to prevent run-on to adjacent areas.	X	X	X			X	X	X
SC12-07	The amount of water used during outdoor washdown activities should be minimized.	X	X	X	X	X	X	X	X
SC12-08	Wash water is collected and filtered and reused, or discharged to the sanitary sewer system through a permitted connection at designated and approved discharge facilities (i.e., dewatering bin).	X	X	X		X	X	X	X
SC12-10	Do not use a running hose to wash down sidewalks, or other hard surface areas. A water-efficient, filtering and recycling device must be used and all wash water must be prevented from entering the storm drain system (curb gutters, streets, alleys, and inlets).	X	X	X	X	X	X	X	X
<b>Potable Water System Flushing</b>									
SC14-01	The aircraft potable water system and water truck flushing/cleaning areas should not be located directly in the path of storm drains.	X	X	X	X	X	X	X	X
SC14-02	Perform potable water system flushing only in designated flushing/cleaning areas that capture or divert all wastewater away from storm drains, or to a structural treatment control, sanitary sewer, or dead end sump with pump.	X	X	X	X	X	X	X	X
SC14-03	Prevent flushing/cleaning areas from contacting storm water run-on and run-off.	X	X	X	X	X	X	X	X
<b>Runway Rubber Removal</b>									
SC15-02	Prevent waste water produced from runway rubber removal activities from entering the storm drainage system by immediately collecting and properly disposing of it.			X	X		X	X	X

No.	BMP Title*	Pollutant or Condition Addressed							
		Bacteria	Nutrients	Metals	Trash	Sediment	Dry Weather Flow	Oil & Grease	Organics
SC15-03	Use manual or mechanical cleaning methods such as mechanical street sweepers to remove rubber particulates from the runway and adjacent paved areas following runway rubber removal activities.			X	X				
SC15-04	Inspect storm drain inlets, catch basins, and runway drainage areas following runway rubber removal activities for any resulting debris, and remove and properly dispose of debris.			X	X				
<b>Parking Lots</b>									
SC16-02	Sweep all parking lot areas on a regular basis to remove accumulated debris and sediment.		X	X	X	X			
SC16-04	Perform sweeping in parking lot areas when the number of parked vehicles is lowest to maximize areas swept.		X	X	X	X			
SC16-06	Clean oily spots from parking lot surfaces with absorbent materials.			X				X	
SC16-07	Perform all repairs to parking lot surfaces during periods of dry weather.			X		X			X
SC16-08	Cover and seal nearby storm drain inlets, catch basins, and manholes during parking lot repairs.			X		X			X
SC16-09	Use drip pans and absorbent materials to catch and collect drips and leaks from paving equipment that are not in use.			X					X
SC16-10	Hot bituminous materials should be preheated, and transferred or loaded away from storm drain inlets.			X					X
SC16-11	Properly dispose of used absorbent materials, debris, and collected drips.			X	X				X
SC16-12	Avoid draining rooftop downspout drains onto paved parking lot surfaces.			X		X	X	X	
SC16-13	Sweep, vacuum, or use other dry methods to remove waste materials generated from repairs.			X	X	X			X
SC16-14	Temporarily store waste materials and debris generated from parking lot repairs in containers or in stockpiles with cover and berm around them and away from storm drain inlets.			X	X	X			X
<b>Storm Drain Maintenance</b>									
SC17-02	Conduct routine self-inspections of the storm drainage system. The Authority should inspect the entire MS4 at least annually, between the dates of May 1 and September 30.	X	X	X	X	X	X	X	X
SC17-03	Appropriate measures should be used to prevent discharges during MS4 cleaning and maintenance.	X	X	X	X	X	X	X	X
SC17-04	Storm drains, inlets, and catch basins should be cleaned and maintained before the wet season and when accumulated trash and debris is greater than 33 percent of design capacity.	X	X	X	X	X	X	X	X
SC17-06	Properly dispose of all accumulated sediments, contaminants, debris and waste water from cleaning and maintenance activities.	X	X	X	X	X	X	X	X
<b>Housekeeping</b>									
SC18-02	The facility/operation should be kept clean and orderly.	X	X	X	X	X		X	X
SC18-04	Sweep all facility and operation areas at least once per week to prevent the accumulation of sediments, debris, and contaminants.			X	X	X			

No.	BMP Title*	Pollutant or Condition Addressed							
		Bacteria	Nutrients	Metals	Trash	Sediment	Dry Weather Flow	Oil & Grease	Organics
SC18-05	Properly dispose of all debris and sediment from sweeping.			X	X	X			
SC18-06	Store significant materials in the appropriate containers that are properly sealed and labeled.			X			X	X	X
<b>Safer Alternative Products</b>									
SC19-01	Whenever possible, use alternative products that are "Regionally Accepted" and are identified as being non-toxic, less toxic, or biodegradable.			X				X	X
<b>Erodible Areas</b>									
SC20-01	Implement erosion control BMPs to stabilize soils.		X	X		X			X
SC20-04	Stabilize loose soils and slopes prior to a forecasted storm event.		X	X		X			X
SC20-05	Prevent material tracking offsite.		X	X		X			X
SC20-06	Divert all storm water away from erodible materials.		X	X		X			X
<b>Building Repair and Construction</b>									
SC21-01	Avoid outdoor repairs and construction during rain events or during any period for which the National Weather Service is forecasting a 50% chance of precipitation.		X	X		X			
SC21-02	Stabilize inactive areas (where there will be no construction for 14 days) or finished slopes or erodible areas with erosion control.		X	X		X			X
SC21-05	Maintain effective inlet protection.		X	X	X	X		X	
SC21-06	Install a stabilized construction entrance to prevent offsite tracking.		X	X		X			
SC21-07	Sweep streets of any loose dirt or materials.		X	X	X	X			
SC21-08	Cover and contain all chemicals, liquids, erodible landscape materials, and fertilizers when not in use.		X	X			X	X	X
SC21-09	Discontinue use of erodible landscape material within 2 days prior to forecasted rain event or when it is raining.		X	X		X			X
SC21-10	Cover and berm material and waste stockpiles when inactive and before the onset of a rain event. Use plastic under-sheets when appropriate.		X	X		X			
SC21-11	Cover waste containers at the end of each work day and prior to a rain event, and have waste recycled or collected and properly disposed of frequently.			X	X				
SC21-16	Designate areas for fueling equipment and vehicles away from inlets and drainage courses, or perform offsite.			X			X	X	
<b>Spill Prevention, Control and Clean-Up</b>									
SR01-02	Post a summary of the Spill Plan and spill response procedures, at key locations, identifying the spill cleanup coordinators, location of cleanup equipment, and phone numbers of regulatory agencies to be contacted in the event of a spill.	X	X	X	X	X	X	X	X
SR01-04	Leak and spill prevention devices should be used.	X	X	X	X	X	X	X	X

No.	BMP Title*	Pollutant or Condition Addressed							
		Bacteria	Nutrients	Metals	Trash	Sediment	Dry Weather Flow	Oil & Grease	Organics
SR01-07	In the event of a spill or release, immediately follow procedures identified in the Spill Plan or facility spill prevention and response procedures.	X	X	X	X	X	X	X	X
SR01-08	Use only dry cleaning methods.	X	X	X	X	X	X	X	X
SR01-09	Properly dispose of all used spill control and clean -up materials.	X	X	X	X	X		X	X
SR01-10	Waste water from washing activities is captured by vacuum and properly disposed of, or is diverted to a structural treatment control, sanitary sewer, or dead end sump with pump.	X	X	X	X	X	X	X	X
<b>Treatment Control BMPs</b>									
TC01-01	Regularly inspect, clean, and maintain all structural treatment control BMPs to prevent the accumulation or resuspension of oil, grease, floating debris and sediments.	X	X	X	X	X	X	X	X
TC01-02	During cleaning operations, close any effluent valves at the treatment control device and properly dispose of any standing water and accumulated waste that are removed. Replace oil absorbent pads in the treatment control device prior to the start of the wet season and as needed.	X	X	X	X	X	X	X	X

Notes:  
 \*These BMPs are applicable to all industrial, commercial, and municipal areas and activities, regardless of whether the activity is conducted by Authority personnel, tenants, contractors, or vendors. For more detailed descriptions of each BMP, see Appendix B of the Authority's SWMP, available online at [www.san.org](http://www.san.org)

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## **I.2 CALTRANS STRATEGIES**

The jurisdiction areas of the California Department of Transportation (Caltrans) include roadways, land adjacent to roadways, and facilities; Caltrans' jurisdictional strategies specifically focus on BMP implementation to reduce known pollutants within these areas. Caltrans is not permitted within the Municipal Permit; however, Caltrans is subject to similar requirements through its MS4 Permit (SWRCB, 2013). Though not permitted within the Municipal Permit, Caltrans has voluntarily contributed to the Water Quality Improvement Plan effort to provide a consistent and subwatershed-wide approach to meeting applicable TMDL requirements. Caltrans voluntary contributions include a detailed list of strategies developed and provided in Table I.2.1. The strategies and schedules presented in Table I.2.1 are subject to change and are contingent upon annual budget approvals and funding availability. They are modified through the adaptive management process as needed.

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**Table I.2.1 Caltrans Jurisdictional Strategies**

SDB ID	Strategy	Implementation Approach/Level of Effort	Location	Implementation or Construction Year	Frequency of Implementation	Cost or Funding Strategy	Responsible City Department and Other Collaborating Departments or Agencies
<b>Jurisdictional Strategies</b>							
<b>Design Stormwater Program</b>							
CT-1	Update and implement design BMPs.	Office of Stormwater Management Design (OSWMD) develops, evaluates, and enhances guidance documents and tools. Refer to Landscape Architecture Program (LAP).	Jurisdiction-wide	FY16	Ongoing		HQ (OSWMD)
	1. Update and implement Landscape Architecture Program (LAP).	LAP provides technical assistance on new and ongoing research related to permanent erosion control and permanent BMPs. In addition, the LAP develops methods to enhance roadside vegetation, which protects slopes from erosion and sediment loss, and may remove pollutants from stormwater runoff.	Jurisdiction-wide	FY16	As needed		HQ (OSWMD)
	2. Implement native landscape/LID Design Guide Strategy.	Require native landscaping/LID in stormwater data report and project plan design guide. Done as part of erosion control. The Project Planning and Design Guide (PPDG) includes an online training program. Projects go through the same review process for native landscape reviews. If project is greater than an acre, subject to a stormwater data report. Minor projects are not subject to as extensive reviews. Try to treat 100% of roadway.	Jurisdiction-wide	FY16	Ongoing		District 11 with HQ (OSWMD)
CT-2	Train staff on Design Stormwater Program.	Train staff on Design Stormwater Program. Curriculum updated to reflect the latest strategies.	Jurisdiction-wide	FY16	Ongoing		District 11
CT-3	Plan and implement treatment BMPs as appropriate.	Treatment BMPs are planned and implemented to comply with Caltrans NPDES Permit project development requirements, TMDL waste load allocations, location specific requirements, and the requirements in the Project Planning and Design Guide (PPDG) according to the Targeted Design Constituent (TDC) approach. The treatment BMP consideration process favors infiltration of stormwater and directs staff to evaluate LID strategies first.	Jurisdiction-wide	FY16	Ongoing		District 11 NPDES and Design with HQ (OSWMD)
CT-4	Develop procedures to encourage mitigation for projects within the same watershed.	Caltrans will investigate procedures to mitigate within the same watershed as new projects.	Jurisdiction-wide	FY16	Ongoing and As needed		District 11 NPDES and Stewardship
CT-5	Implement a self-audit program to ensure BMPs are designed, implemented, and maintained.	Design Compliance Monitoring Program is a self-audit program that uses the SWDR (Stormwater Data Report) as a tool for documenting compliance with the design pollution prevention and treatment BMP requirements of the 1999 NPDES Permit, 2012 NPDES Permit, and the Caltrans' 2003 Statewide SWMP. The SWDR and its checklists are reviewed by District staff to ensure that BMPs are being considered and appropriately incorporated into Caltrans' projects. This review also ensures stormwater compliance throughout the project planning and design phases.	Jurisdiction-wide	FY16	Ongoing		District 11 NPDES

**Table I.2.1 Caltrans Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach/Level of Effort	Location	Implementation or Construction Year	Frequency of Implementation	Cost or Funding Strategy	Responsible City Department and Other Collaborating Departments or Agencies
<b>Construction Management</b>							
CT-6	Administer a program to oversee implementation of BMPs during the construction phase of Caltrans projects. Includes inspections at an appropriate frequency and enforcement of requirements.	Caltrans complies with the statewide Construction General Permit. The district holds pre-construction meetings for all projects that require a SWPPP. For larger projects, there are year-round, weekly inspections.	Jurisdiction-wide	FY16	Ongoing		District 11 with the Division of Construction
CT-7	Provide construction storm water training for District staff.	Continue implementation of the construction stormwater classes offered throughout the Caltrans districts by the Division of Construction. Classes updated to reflect latest permit requirements.	Jurisdiction-wide	FY16	Ongoing		District 11 with the Division of Construction
CT-8	Implement a self-audit program to ensure compliance with water quality requirements.	Continue implementation of the Construction Compliance Evaluation Plan. Evaluates contractor's Storm Water Pollution Prevention Plan (SWPPP) or WPCP implementation and assesses compliance with water quality requirements, evaluates stormwater contract administration, and incorporates quality control, quality assurance, and independent assurance elements.	Jurisdiction-wide	FY16	Ongoing		District 11 NPDES
CT-9	Provide maintenance training for employees.	The Division of Maintenance has formal stormwater management training sessions for new employees and refresher training for existing staff. Both types of courses are scheduled from one to 15 hours in length. In addition to formal training, Division of Maintenance policy is that Supervisors conduct stormwater BMP tailgate meetings a minimum of every 10 working days or when there is a change in the type of work activity. These meetings are to review BMPs prior to conducting roadside maintenance activities.	Jurisdiction-wide	FY16	Ongoing		District 11 with Division of Maintenance
<b>Maintenance</b>							
<i>Facilities and Areas</i>							
CT-10	Administer a program to require implementation of minimum BMPs for facilities and leased space (air space leases).	Refer to SWMP; Leased space is required to meet current stormwater regulations.	Jurisdiction-wide	FY16	Ongoing		District 11 with ROW Department

**Table I.2.1 Caltrans Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach/Level of Effort	Location	Implementation or Construction Year	Frequency of Implementation	Cost or Funding Strategy	Responsible City Department and Other Collaborating Departments or Agencies
CT-11	Inspection of facilities and leased areas.	<p>The Department will continue to reduce the potential for storm water pollution by the development and implementation of Facility Pollution Prevention Plans (FPPPs), which specify controls to minimize contact between storm water and the various substances at highway maintenance facilities. Per Maintenance Manual Vol.2 under F Family, periodic inspections are conducted to evaluate whether the BMPs are adequate and properly implemented. The SWMP states this provision regarding FPPP.</p> <p><i>Maintenance Facility Pollution Prevention Plans. Facility Pollution Prevention Plans (FPPP) has been developed for each maintenance facility owned or operated by the Department. The FPPPs describe the activities conducted at the facility and the BMPs to be implemented to reduce the discharge of pollutants in storm water runoff from these facilities. Supervisors inspect their maintenance facilities monthly to monitor the implementation and adequacy of the BMPs. A report that includes the date of the inspection, the name of the inspector, observations, and recommended corrective actions is prepared by the Supervisor. All inspection records will be maintained for a period of 3 years. Any observed instances of non-compliance will be reported to the District Maintenance.</i></p>	Jurisdiction-wide	FY16	Ongoing		District 11 with ROW Department
CT-12	Implement BMPs targeting reduction of over-irrigation.	Reduce over irrigation by requiring native, drought-tolerant plants and irrigation system improvements.	Jurisdiction-wide	FY16	Ongoing		District 11 Landscape and Stewardship
CT-13	Proactively monitor for erosion, and complete repair and slope stabilization.	Division of Maintenance conduct inspections on a five-year cycle. Program includes self-imposed goal to annually inspect approximately 20% of slopes in each District and includes investigating public complaints and widely understood problem areas (WUPAs).	Jurisdiction-wide	FY16	Ongoing		District 11 with Division of Maintenance
<b>MS4 Infrastructure</b>							
CT-14	Inspect and clean catch basins and conduct source investigations to identify upstream source of materials.	Inspect catch basins once every three years with 1/3 inspected per year. If needed, catch basins are cleaned. If a catch basin is cleaned, a source inspection is conducted to identify source of sediment or other material.	Jurisdiction-wide	FY16	Ongoing		District 11 with Division of Maintenance
CT-15	Proactively repair and replace MS4 components to provide source control from MS4 infrastructure.	Prioritize MS4 repairs. Funding for repairs based on size of project. Districts are able to conduct small repairs immediately, while larger projects are prioritized for repair out of annual budget.	Jurisdiction-wide	FY16	Ongoing		District 11 with Division of Maintenance

**Table I.2.1 Caltrans Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach/Level of Effort	Location	Implementation or Construction Year	Frequency of Implementation	Cost or Funding Strategy	Responsible City Department and Other Collaborating Departments or Agencies
<b>Roads and Streets</b>							
CT-16	Implement operation and maintenance activities on streets and roadways.	Refer to Work Plan.	Jurisdiction-wide	FY16	Ongoing		District 11 with Division of Maintenance
	1. Implement street sweeping.	Every road swept once a month. To meet performance schedule, street sweepers are replaced on a four-year cycle.	Jurisdiction-wide	FY16	Ongoing		District 11 with Division of Maintenance
	2. Perform sweeping of medians on high-volume arterial roadways.	Medians with shoulders are swept approximately once per month.	Jurisdiction-wide	FY16	Ongoing		District 11 with Division of Maintenance
<b>Pesticide, Herbicides, and Fertilizer BMP Program</b>							
CT-17	Implement BMPs to address application, storage, and disposal of pesticides, herbicides, and fertilizers.	Refer to Vegetation Control Plan. Caltrans is actively reducing fertilizer/pesticide application and only applies to targeted areas. All pesticide use is reported to the California Department of Pesticide Regulation.	Jurisdiction-wide	FY16	Ongoing		District 11 with Roadside Maintenance Office and California DPR
<b>Illicit Connections/Illegal Discharges</b>							
CT-18	Identify and resolve potential illicit connections/illegal discharges (IC/IDs).	Continue maintaining a hotline for reporting of illicit discharges. Majority of calls come from contractors and construction and maintenance staff. Continue coordination with other jurisdictions to address IC/IDs and provide written notification of potential IC/IDs associated with a municipality's jurisdiction.	Jurisdiction-wide	FY16	Ongoing		District 11 with other jurisdictions
CT-19	Identify erosion and slope stabilization issues on private or municipal property and inform the source for repair.	When Caltrans staff or contractors identify erosion or slopes in need of repair, it is treated as an IC/ID and the property owner is notified.	Jurisdiction-wide	FY16	Ongoing		District 11 with Division of Maintenance
<b>Public Education and Participation</b>							
CT-20	Implement a public education and participation program to raise awareness of storm water pollution and prevention on California's freeways and highways.	Continue to implement the "Don't Trash California" Campaign, Adopt-A-Highway program, and partner with local organizations.	Jurisdiction-wide	FY16	Ongoing		District 11 with HQ (OSWMD)
	1. Conduct trash cleanups.	Conduct trash cleanups through local probation and adopt-a-highway programs. Encourage prevention through "Don't Trash California" campaign.	Jurisdiction-wide	FY16	Ongoing		District 11 Division of Maintenance
	2. Target school-based education and outreach.	Provide outreach to schools raising awareness of stormwater pollution through watershed model demonstrations. Hold bring-your-child-to-work days with watershed model.	Jurisdiction-wide	FY16	Ongoing		District 11 with HQ (OSWMD)

**Table I.2.1 Caltrans Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach/Level of Effort	Location	Implementation or Construction Year	Frequency of Implementation	Cost or Funding Strategy	Responsible City Department and Other Collaborating Departments or Agencies
<b>Other Nonstructural Strategies</b>							
CT-21	Provide sanitation and trash management, implement access control in targeted areas.	As necessary, implement methods such as rip-rap, chain link fences, and remove low-lying brush to discourage use of right-of-way areas.	Jurisdiction-wide	FY16	Ongoing		District 11 NPDES, Design and Maintenance
CT-22	Continue participating in source reduction initiatives.	Continue participation in Brake Pad Partnership through work with California Stormwater Quality Association.	Jurisdiction-wide	FY16	Ongoing		HQ with CASQA
CT-23	Remove invasive plants.	Remove invasive plants through maintenance and construction programs.	Jurisdiction-wide	FY16	Ongoing		District 11 with Division of Maintenance
CT-24	Protect areas that are functioning naturally.	Required as part of the stormwater data report (SWDR), the Project Planning and Design Guide (PPDG), and the Natural Environment as Treatment (NEAT) programs, Caltrans minimizes disturbance of exiting vegetation and avoids hardscapes.	Jurisdiction-wide	TBD	As available		District 11 with HQ (OSWMD)
CT-25	Collaborate with RPs on WQIPs.	Voluntarily participate in the development of the WQIP and continue to collaborate with RAs on water quality planning and implementation projects.	Jurisdiction-wide	FY16	Ongoing		District 11
<b>Multiuse Treatment Areas</b>							
<b>Infiltration and Detention Basins</b>							
CT-26	BMP Retrofit (#282401)	Chollas Creek BMP Retrofit Project; Interstate 15 and 94. There are 4 modified infiltration trenches, 1 austin vault sand filter, and 3 biofiltration swales. DSA is modified to 3.74 acres from PA&ED of 4.69 acres.	San Diego Bay, Chollas Creek	2014	2014		District 11
CT-27	Construct Lanes and Transit Station) (#2T1301)	Construct BRT Lanes and Transit Station on Interstate 15. Install 2 bioswales and 1 media filter to treat approximately 18 acres.	San Diego Bay, Chollas Creek	2014	2016		District 11
<b>Other Opportunities</b>							
CT-28	Soundwall Construction (#2T1831)	Soundwall Construction; I-805 (BMPs?). Only the last portion of project falls in Chollas Creek.	San Diego Bay, Chollas Creek	2014	2016		District 11

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### **I.3 CITY OF CHULA VISTA STRATEGIES**

The City of Chula Vista (Chula Vista) is located within the Sweetwater River and Otay River subwatersheds. Jurisdictional strategies will target the Focused Priority Conditions in both subwatersheds, provided in Table I.3.1. Chula Vista will implement jurisdictional programs city-wide. Additional strategies will be implemented west of Interstate 805, which contains high-density urban land uses with aging infrastructure, to address the Focused Priority Conditions. The area east of Interstate 805 generally has newer development and infrastructure, and more pervious area and BMP implementation, because these areas were developed under more recent permits and land development requirements.

Chula Vista has a robust education and outreach program, which includes Home-Owners Association (HOA) collaboration, bimonthly trash bill inserts, collaboration with “I Love a Clean San Diego” on cleanup events, and a revamped website. Chula Vista also formed the CLEAN Team, which consists of the Conservation, Environmental Services, and Storm Water Management Sections of the City. In addition, a new City Operations Sustainability Plan, detailing water use, energy use, green purchasing, recycling and waste management, pollution prevention, transportation, green buildings, and green infrastructure, was adopted in June 2014. Table I.3.2 shows the BMPs of Chula Vista’s JRMP that are targeted toward addressing the Focused Priority Condition.

Strategies and implementation schedules were identified using best information available on efficiency, effectiveness, and level of effort estimated to achieve compliance with numeric goals. The adaptive management process provides the framework to evaluate progress toward meeting the goals and allows for modification of strategies. As strategies are modified, the WQIP is updated. The implementation of the strategies and schedules presented in Table I.3.1 is contingent upon annual budget approvals and funding availability.

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**Table I.3.1 City of Chula Vista  
 Jurisdictional Strategies**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii)) <sup>1</sup>	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutant or Condition Addressed							Source <sup>2</sup> (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
					Bacteria	Nutrients	Metals	Trash <sup>3</sup>	Sediment	Flow	Habitat/ Wildlife		
<b>Core JRMP Strategies (Provisions E.2 – E.7)</b>													
<b>E.2 Illicit Discharge, Detection, and Elimination (IDDE) Program</b>													
CV-1	Implement Illicit Discharge, Detection, and Elimination (IDDE) Program. Requirements include: maintaining an MS4 map, using municipal personnel and contractors to identify and report illicit discharges, maintaining a hotline for public reporting of illicit discharges, monitoring MS4 outfalls, and investigating and addressing any illicit discharges.	The City contracts out outfall monitoring for more than 125 major outfalls in the City, receives hotline and email complaints, and works to eliminate illegal discharges. Refer to JRMP Section 3.	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	Commercial, Industrial, Municipal, and Residential Areas	Public Works Operations, NPDES, contractor	
CV-2	Implement program for employee reporting of potential illicit discharges.	Chula Vista NPDES staff trains City employees to report illegal discharges. Refer to JRMP Section 3.	Prior to FY16	Continuous- As needed	X	X	X	X	X	X	Commercial, Industrial, Municipal, and Residential Areas	Public Works Operations, NPDES	
CV-3	Utilize "Act Chula Vista" smartphone application to encourage residents to report potential illicit discharges or other storm water violations.	"Act Chula Vista" smartphone application is currently in use. There is also a hotline for employees and the general public.	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	Commercial, Industrial, Municipal, and Residential Areas	Public Works Operations	
<b>E.3 Development Planning</b>													
<b>All Development Projects</b>													
CV-4	For all development projects, administer a program to ensure implementation of source control BMPs to minimize pollutant generation at each project and implement LID BMPs to maintain or restore hydrology of the area, where applicable and feasible.	All development projects are required to implement minimum BMPs. Refer to Jurisdictional Runoff Management Program (JRMP) Section 4 and the BMP Design Manual.	FY15-16	Continuous – Ongoing	X	X	X	X	X	X	Land development	Land Development Services. NPDES	
CV-5	Amend municipal code and ordinances to facilitate and encourage LID opportunities.	Appropriate City Ordinances have been amended with the JRMP update. Refer to JRMP Appendix A – Chula Vista Municipal Code Chapter 14.20 – Storm Water Management and Discharge Control.	FY15-16	Continuous – Ongoing	X	X	X	X	X	X	Land development	NPDES	

**Table I.3.1 City of Chula Vista  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii)) <sup>1</sup>	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutant or Condition Addressed							Source <sup>2</sup> (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
					Bacteria	Nutrients	Metals	Trash <sup>3</sup>	Sediment	Flow	Habitat/ Wildlife		
CV-6	Train staff on LID regulatory changes and BMP Design Manual.	Storm water staff are in regular contact with Development Services staff regarding development projects. Training is provided as changes occur. Refer to JRMP Sections 4 and 8.	FY15-16	Continuous – As needed	X	X	X	X	X	X	X	Land development	NPDES, Land Development Services
<b>Priority Development Projects (PDPs)</b>													
CV-7	For PDPs, administer a program requiring implementation of structural BMPs to control pollutants and manage hydromodification. Includes confirmation of design, construction, and maintenance of PDP structural BMPs.	All PDPs are required to implement and maintain post construction BMPs. Refer to JRMP Section 4.	FY15-16	Continuous – Ongoing	X	X	X	X	X	X	X	Land development	Land Development Services, NPDES
	a. Administer self-certification program for treatment control BMP compliance.	Self-certification program and corresponding form are already being utilized by applicable projects. Refer to JRMP Section 4.	Prior to FY16	Continuous – Ongoing	X	X	X	X	X	X		Land development	NPDES, Developers
CV-8	Amend BMP Design Manual for trash areas. Require the design of trash enclosures to prevent run-on and runoff, away from storm drains, and to provide cover.	Trash enclosure details are included in Chula Vista Municipal Code Chapter 19.58.340, the City's Recycling and Solid Waste Planning Manual, and the BMP Design Manual.	FY15-16	Continuous – Ongoing				X				Land development	NPDES, Land Development Services
<b>E.4 Construction Management</b>													
CV-9	Administer a program to oversee implementation of BMPs during the construction phase of land development. Includes inspections at an appropriate frequency and enforcement of requirements.	All construction sites are required to implement minimum BMPs. High priority sites are inspected 2x per month during the rainy season, monthly during the dry season; low priority and inactive sites are inspected monthly during the rainy season, as needed during the dry season. Refer to JRMP Section 5. All Construction projects are required to implement minimum BMPs.	Prior to FY16	Continuous – Ongoing				X	X	X		Construction sites	NPDES and Construction Inspection Division

**Table I.3.1 City of Chula Vista  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii)) <sup>1</sup>	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutant or Condition Addressed							Source <sup>2</sup> (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
					Bacteria	Nutrients	Metals	Trash <sup>3</sup>	Sediment	Flow	Habitat/ Wildlife		
<b>E.5 Existing Development</b>													
<b>Commercial, Industrial, Municipal, and Residential Facilities and Areas</b>													
CV-10	Administer a program to require implementation of minimum BMPs for existing development (commercial, industrial, municipal, and residential) that are specific to the facility, area types, and pollutants generated, as appropriate. Includes inspection of existing development at appropriate frequencies and using appropriate methods.	Current inspection program is facilities-based. High priority areas are inspected once per year, and low priority areas are inspected once every five years. Refer to JRMP Section 6 and Appendix C. Staff has been dedicated to complete this task.	FY15-16	Continuous-Ongoing	X	X	X	X	X	X	Commercial, Industrial, Municipal, and Residential Areas	NPDES, Construction Inspection Division	
	a. Update minimum BMPs for existing residential, commercial, and industrial development.	General minimum BMPs for trash include good housekeeping and proper waste disposal, cleaning of storm drains, stenciling and signage, maintenance of trash receptacle areas. Refer to JRMP Appendix C.	FY15-16	Continuous-Ongoing	X	X	X	X		X	Commercial, Industrial, Municipal, and Residential Areas	NPDES	
	b. Design, implement, and enforce mobile business program.	Chula Vista has a mobile business program in effect. Business License Department administers storm water information packet and questionnaire, and businesses must agree to not discharge pollutants into storm drains. Storm Water Section has final approval. Mobile businesses are inspected as needed.	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	Mobile commercial and construction businesses	NPDES	
CV-11	Implement pet waste program. May include installation and maintenance of pet waste bag dispensers and trash bins, and signage and education.	Pet waste bag stations are in available in the majority of City parks. Pet waste stations are maintained by parks staff and/or citizens and volunteer groups.	Prior to FY16	Continuous-Ongoing	X		X				Municipal and Residential Areas	NPDES, Parks Operations, Volunteer groups	

**Table I.3.1 City of Chula Vista  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii)) <sup>1</sup>	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutant or Condition Addressed							Source <sup>2</sup>  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
					Bacteria	Nutrients	Metals	Trash <sup>3</sup>	Sediment	Flow	Habitat/ Wildlife		
CV-12	Promote and encourage implementation of minimum BMPs at residential areas.	The City's CLEAN education program is geared towards residents and common pollutant generating activities that residents perform such as home and garden maintenance, pool cleaning, and auto maintenance.	FY15-16	Continuous – Ongoing	X	X	X	X	X	X	Residential	NPDES, CLEAN Team, Otay Water District, Sweetwater Authority	
	a. Encourage use of compost/soil amendments as opposed to fertilizer to decrease runoff.	The City has classes at the Living Coast Discovery Center to provide information to residents about composting.	FY15-16	Continuous – Ongoing		X				X	Residential	Living Coast Discovery Center, Environmental Services	
	b. Promote and collaborate with water agencies and other groups to encourage implementation of water conservation programs that improve water quality by reducing over-irrigation with smart products or turf replacement and capturing rain water in residential areas.	Chula Vista works with the San Diego County Water Authority, Otay Water District, and Sweetwater Water Authority to provide classes to residents that encourage water smart landscaping and gardening. Funding secure for FY16.	FY15-16	Continuous – Ongoing						X	Residential	NPDES, San Diego County Water Authority, Otay Water District, Sweetwater Authority	
CV-13	Prohibit and discourage illegal dumping.	Storm Water staff respond to reports of illegal dumping via hotline calls and inspections programs and enforces property owners and/or businesses to clean up their sites and maintain them clean. Environmental services works with Police Department to discourage illegal dumping in and around trash dumpsters, alley ways, open fields by providing signage, fines, education. Republic Services provides for bulky item pick up for residents to discourage illegal dumping. A Household Hazardous Waste Facility is available for residents of Chula Vista, Imperial Beach, and National City to promote proper disposal of hazardous materials.	Prior to FY16	Continuous – Ongoing		X		X			Residential	NPDES, Environmental Services, Police Department, Republic Services	

**Table I.3.1 City of Chula Vista  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii)) <sup>1</sup>	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutant or Condition Addressed							Source <sup>2</sup> (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
					Bacteria	Nutrients	Metals	Trash <sup>3</sup>	Sediment	Flow	Habitat/ Wildlife		
<b>MS4 Infrastructure</b>													
CV-14	Implement operation and maintenance activities (inspection and cleaning) for MS4 and related structures (catch basins, storm drain inlets, detention basins, etc.) for water quality improvement.	Chula Vista has an MS4 inspection and maintenance program in place. Storm drain structures are inspected once a year and cleaned where necessary based on inspection results. Storm drain pipes are designed to be self-cleaning and do not typically require scheduled cleaning. Storm drain pipes are video surveyed on an as needed basis. Structures and pipes are repaired as needed based on the results of inspections. Open-channel cleaning is completed on an as needed basis.	Prior to FY16	Continuous – Ongoing	X	X	X	X	X		MS4	Wastewater Operations, NPDES	
	a. Optimize catch basin cleaning to maximize pollutant removal (prioritize catch basin cleaning based on collected data).	Current catch basin cleaning is once a year. Cleanings are prioritized by amount of trash.	Prior to FY16	Continuous – Ongoing	X	X	X	X	X		MS4	Wastewater Operations, NPDES	
	b. Proactively repair and replace MS4 components to provide source control from MS4 infrastructure.	Chula Vista has an MS4 inspection and maintenance program in place and provides surveys and performs repairs as needed.	Prior to FY16	Continuous – Ongoing	X	X	X	X	X		MS4	Wastewater Operations	
CV-15	Implement controls to prevent infiltration of sewage into the MS4 from leaking sanitary sewers.	The City inspects, cleans, and maintains a total of 498 miles of sewer main. This includes critical maintenance areas, which are cleaned more than once per year. Chula Vista has a monitoring survey and SSO plan.	Prior to FY16	Continuous – Ongoing	X	X				X	MS4	Wastewater Operations, Wastewater Engineering	
	a. Identify sewer leaks and areas for sewer pipe replacement prioritization.	Wastewater Section performs repairs.	Prior to FY16	Continuous – Ongoing	X	X				X	Sewer and MS4	Wastewater Operations	
<b>Roads, Streets, and Parking Lots</b>													
CV-16	Implement operation and maintenance activities for public streets, unpaved roads, paved roads, and paved highways	Street sweeping is contracted out. Commercial, industrial, and business street segments are swept once per two weeks. Residential, center islands, medians, and center lines street segments and public parking lots are swept once per two months. Republic manages Main Street and areas near landfill. Refer to JRMP Section 6.	Prior to FY16	Continuous - Ongoing	X	X	X	X	X		Roads and Highways	Street Maintenance, Contractor	

**Table I.3.1 City of Chula Vista  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii)) <sup>1</sup>	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutant or Condition Addressed							Source <sup>2</sup> (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
					Bacteria	Nutrients	Metals	Trash <sup>3</sup>	Sediment	Flow	Habitat/ Wildlife		
<b>Pesticides, Herbicides, and Fertilizer BMP Program</b>													
CV-17	Require implementation of BMPs to address application, storage, and disposal of pesticides, herbicides, and fertilizers on commercial, industrial, and municipal properties. Includes education, permits, and certifications.	The City has developed a comprehensive program aimed at preventing or reducing pesticides, herbicides, and fertilizers from entering the storm water system and causing direct or indirect harm on non-target flora and fauna and receiving waters for municipal facilities. Whenever practicable, integrated pest management techniques that rely on nonchemical solutions are implemented. Refer to JRMP Section 6 and Appendix C.	FY16	Continuous – Ongoing		X						Commercial, Industrial, and Municipal Landscaping	Parks Operations, Open Space
<b>Retrofit and Rehabilitation in Areas of Existing Development</b>													
CV-18	Develop and implement a strategy to identify candidate areas of existing development appropriate for retrofitting projects and facilitate the implementation of such projects.	The City will conduct a Baseline Trash Assessment Study to determine where high volume trash areas are located and if their respective drainage areas can be retrofitted with BMPs, especially those for trash. Retrofits pending study results.	FY16	Continuous – Ongoing				X				Various	Development Services, Engineering, NPDES, applicable City Departments
CV-19	Identify candidate areas of existing development for stream, channel, or habitat rehabilitation projects and facilitate implementation of such projects.	The City's JRMP Appendix F describes the methods used for identifying and assessing potential stream, channel, or habitat rehabilitation projects in existing development areas and facilitating such projects. Rehabilitation project selection will be based upon a variety of factors including addressing the FPWQC of trash, existing stream or habitat degradation, multiple benefits of the project, and feasibility of implementation. Projects can arise as part of the Offsite Alternative Compliance Program. The program will include protocols related to funding mechanisms for project construction and long-term maintenance, payment and credit structures, and water quality equivalency standards. Grant funding can be utilized as available.	FY17	Continuous – Ongoing	X	X	X	X	X	X	X	Various	Development Services, Engineering, NPDES, applicable City Departments

**Table I.3.1 City of Chula Vista  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii)) <sup>1</sup>	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutant or Condition Addressed							Source <sup>2</sup>  (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
					Bacteria	Nutrients	Metals	Trash <sup>3</sup>	Sediment	Flow	Habitat/ Wildlife		
<b>E.6 Enforcement Response Plan</b>													
CV-20	Implement escalating enforcement responses to compel compliance with statutes, ordinances, permits, contracts, orders, and other requirements for IDDE, development planning, construction management, and existing development in the Enforcement Response Plan.	The City has an enforcement program in place, which provides for escalating enforcement. Escalated enforcement actions include issuances of Notices of Violation, Civil Penalties, Notices to Clean and Abate, Notices to Cease and Desist. Refer to the Enforcement Response Plan in the JRMP.	FY15-16	Continuous – Ongoing	X							Commercial, Industrial, Municipal, and Residential Areas	NPDES
	a. Increased enforcement on businesses that do not implement trash BMPs.	Based on inspection program and additional information collected based on strategy CV-33. Efforts will rely on education program as well.	FY15-16	Continuous – Ongoing				X				Commercial, Industrial, Municipal, and Residential Areas	NPDES
	b. Provide education and enforcement of water-using mobile businesses.	The mobile business program and Enforcement Response Plan are used.	Prior to FY16	Continuous – Ongoing						X		Mobile commercial and construction businesses	NPDES
CV-21	Enforce minimum BMPs for existing residential, commercial, and industrial development. Includes power washing at non-residential sites.	Minimum BMPs are required for existing development. See Supplemental Attachment 1 to this Appendix. Refer to JRMP Section 5 and Appendix C.	FY15-16	Continuous – Ongoing	X	X	X	X	X	X		Commercial, Industrial, Municipal, and Residential Areas	NPDES
	a. Increased education and enforcement for existing development with trash issues.	Facilities with an identified trash problem will be targeted for increased inspections, education, and enforcement.	FY17	Continuous – Ongoing				X				Commercial, Industrial, Municipal, and Residential Areas	NPDES, Environmental Services

**Table I.3.1 City of Chula Vista  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii)) <sup>1</sup>	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutant or Condition Addressed							Source <sup>2</sup>  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
					Bacteria	Nutrients	Metals	Trash <sup>3</sup>	Sediment	Flow	Habitat/ Wildlife		
<b>E.7 Public Education and Participation (B.3.b.(1)(a)(iii))</b>													
CV-22	Implement a public education and participation program to promote and encourage development of programs, management practices, and behaviors that reduce the discharge of pollutants in storm water prioritized by high-risk behaviors, pollutants of concern, and target audiences.	The CLEAN Team (NPDES, Environmental Services Section, and Conservation Section) works together on public outreach programs. Refer to JRMP Section 8.	Prior to FY16	Continuous – Ongoing							Commercial, Industrial, Municipal, and Residential Areas	CLEAN Team (NPDES, Environmental Services, Conservation)	
	a. Improve consistency and content of websites to highlight updated storm water regulations.	The Chula Vista website is currently being updated and will include information for the public on environmental programs. Information can also be sent out in bimonthly trash bill inserts.	Prior to FY16	Continuous – Ongoing	X	X	X	X	X	X	Commercial, Industrial, Municipal, and Residential Areas	CLEAN Team	
	b. Promote community events and CLEAN Business Program.	The CLEAN team has booths at public festivals and provides information. The clean business program, led by the Environmental Services Section, verifies business as CLEAN via a checklist process, which includes provisions for pollution prevention and storm water BMPs.	Prior to FY16	Continuous – Ongoing	X	X	X	X	X	X	Commercial, Industrial businesses	CLEAN Team	
CV-23	Provide municipal staff training.	The City primarily educates its municipal staff through workshop training, refresher sessions, staff meetings, and on the job training. Training for municipal personnel is focused on maintenance crews, land development staff, planners, landscape architects, and staff from other departments. Municipal personnel are also notified of regional workshops, and are encouraged to participate in workshops and seminars relevant to their type of work. Refer to JRMP Section 8.	Prior to FY16	Continuous – As Needed	X	X	X	X	X	X	N/A	NPDES	
<b>Non-JRMP Strategies (Optional Strategies, Provision B.3.b.(1)(b))</b>													
<b>Nonstructural</b>													
CV-24	Enhance commercial and industrial facility inspections to focus on trash.	Current inspection program is facilities-based and will also inspect per high volume trash areas determined in Baseline Assessment Study (CV-33). High priority areas are inspected once per year, and low priority areas are inspected once every five years. Inspection form was revised to further evaluate trash areas. Refer to JRMP Section 6 and Appendix C. Staff secured for FY16.	FY15-16	Continuous – Ongoing	X	X	X	X		X	Commercial and Industrial Areas	NPDES	

**Table I.3.1 City of Chula Vista  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii)) <sup>1</sup>	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutant or Condition Addressed							Source <sup>2</sup>  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
					Bacteria	Nutrients	Metals	Trash <sup>3</sup>	Sediment	Flow	Habitat/ Wildlife		
CV-25	Continue participating in trash source reduction activities and initiatives.	Participate in initiatives as applicable to FPWQC. Triggers include ability to make City ordinance changes, partnering with applicable stakeholders, funding for staff, budget to obtain a consultant or contractor to assist with enhancements to the existing education program.	Prior to FY16	Continuous – Ongoing				X				City-wide	City-wide
	a. Continue implementation of smoking ban.	Smoking is banned at City of Chula Vista parks and in all outdoor dining areas. The smoking ban prevents the littering of these areas with cigarette butts.	Prior to FY16	Continuous – Ongoing				X				Commercial, City-wide	City-wide
	b. Continue and enhance education programs to prevent littering.	The City will implement enhancements to existing programs where possible to improve trash education. This activity will be based on the baseline trash assessment study and identification of high volume trash areas, especially from sources such as commercial areas. Funding is secured for FY16.	FY16-17	Continuous – As needed	X			X			X	Commercial, City-wide	CLEAN Team
	c. Expand educational outreach to multi-unit family complexes.	Provide educational outreach to HOAs. Mailers with trash information are sent out twice a year via Environmental Services Section, and information on over irrigation, BMPs, and general storm water education with a focus on trash can be included. Triggers based on completion of baseline trash assessment study to determine applicable multi-unit family complexes.	FY16-17	Semi-annually	X	X	X	X	X	X	X	Residential Areas	CLEAN Team
	d. Develop an outreach and training program for residential property managers responsible for HOAs.	The program will target trash and irrigation reduction. Triggers based on results of baseline trash assessment study, budget approval, and staff to implement.	FY16-17	Semi-annually	X	X	X	X	X	X	X	Residential Areas	CLEAN Team
	e. Enhance education and outreach based on results of effectiveness survey and changing regulatory requirements.	Chula Vista plans to conduct surveys and will collaborate with CLEAN team to improve outreach based on survey results. Trigger based on results of baseline trash study and survey data.	FY15-16	Continuous – Ongoing	X	X	X	X	X	X		Commercial, Industrial, Municipal, and Residential Areas	NPDES, CLEAN Team
CV-26	Storm Drain Stenciling	In collaboration with citizen and/or volunteer groups, install storm drain stencils on storm drains within high volume trash areas as needed. Triggers include completion of baseline trash assessment study, and partnerships with volunteer groups.	FY16-17	Continuous – As needed	X	X	X	X	X	X		N/A	Volunteer groups

**Table I.3.1 City of Chula Vista  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii)) <sup>1</sup>	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutant or Condition Addressed							Source <sup>2</sup>  (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))	
					Bacteria	Nutrients	Metals	Trash <sup>3</sup>	Sediment	Flow	Habitat/ Wildlife			
CV-27	Enhance and expand trash cleanups and educational events through community-based organizations involving target audiences.	Increase effectiveness and reach of trash/beach cleanups, educational opportunities, and community based efforts. Partnerships and sponsorships with I Love A Clean San Diego and others are recommended to be continued and enhanced. To effectively target stream clean-up efforts, focus on partnerships with community organizations which provide strong engagement with target audiences and communities. Triggers include obtaining data from the baseline trash assessment study and budget availability to contract out enhanced educational activities.	FY16	Continuous – Ongoing	X			X				X	Waste Disposal	NPDES, CLEAN Team
CV-28	Enhance street sweeping program based on high volume trash area assessment study.	Increase street sweeping in high volume trash areas, as needed. Funding dependent on results of baseline trash assessment study, established hot spot areas, and budget availability.	FY16-17	Continuous – As needed	X	X	X	X					Commercial, Industrial, Municipal, and Residential Areas	Street Maintenance, Contractor
CV-29	Develop and implement a strategy to identify candidate areas of existing development appropriate for retrofitting projects and facilitate the implementation of such projects.	The City will perform a Baseline Trash Assessment Study (CV-33) to determine where high volume trash areas are located and if their respective drainage areas can be retrofitted with BMPs, especially those for trash. Retrofits pending study results.	FY16+	Continuous – Ongoing				X					Commercial, Industrial, Municipal Areas	Land Development, Engineering, NPDES
	a. Implement program to retrofit trash enclosures of municipal facilities with an established trash problem. Use as a pilot program to expand to existing commercial areas, with the use of an incentive program.	City's Recycling & Solid Waste Planning Manual and CVMC 19.58.340 requires newly constructed trash enclosures to be designed to exclude rain. Trigger for existing trash retrofits dependent upon funding, Baseline Trash Assessment Study, interim goals being met, and ordinance/policy changes. Consider partnerships with waste hauler and other stakeholders to develop incentive program, if feasible.	FY17-18	Continuous-Ongoing				X					Commercial, Industrial, Municipal Areas	NPDES, Environmental Services, commercial and industrial businesses

**Table I.3.1 City of Chula Vista  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii)) <sup>1</sup>	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutant or Condition Addressed							Source <sup>2</sup>  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
					Bacteria	Nutrients	Metals	Trash <sup>3</sup>	Sediment	Flow	Habitat/ Wildlife		
CV-30	Implement stream, channel, and habitat rehabilitation projects as needed.	This strategy may be triggered if 1) Interim goals are not met, 2) Stream or habitat rehabilitation is determined to be a more effective pathway, relative to additional structural or non-structural BMPs to meeting trash goals, 3) Funding and staffing has been secured, 4) Partners, MOUs, and permits required by regulatory agencies are secured, and 5) Recommendations from the community are identified and consensus and community support has been achieved. Will occur in areas identified during feasibility studies. The following resources, funds, and steps are needed to implement this strategy if the above triggers are met or at the City's discretion: 1) Identify project locations, 2) Secure funds in the form of general funds, bonds, or grants, 3) Obtain City Council approval of Capital Improvement Projects budget, 4) Initiate preliminary engineering to narrow project scope, 5) Hire design consultant to develop detailed construction plans and construction cost estimates, 6) Complete construction contractor bid and award process for construction phase, 7) Construct project, 8) Operation and maintenance into perpetuity.	Trigger	Continuous – Ongoing	X	X	X	X	X	X	X	Various	Development Services, Engineering, NPDES, applicable City Departments
CV-31	Conduct additional trash monitoring to target high volume trash areas and determine if BMPs are effective.	Chula Vista will develop a trash monitoring program to increase visual trash monitoring, increase inspections of facilities as needed, and collect additional trash data from commercial/industrial facilities. Funding secured for FY16.	FY15-16	Continuous- As needed				X				N/A	NPDES, contractor

**Structural**

**Table I.3.1 City of Chula Vista  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii)) <sup>1</sup>	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutant or Condition Addressed							Source <sup>2</sup>  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
					Bacteria	Nutrients	Metals	Trash <sup>3</sup>	Sediment	Flow	Habitat/ Wildlife		
CV-32	Install and maintain partial or full capture treatment control BMPs in high volume trash areas as needed.	City will complete Baseline Trash Study to determine where BMP retrofits can occur. Funding for retrofits is based on interim goals and installed in conjunction with Trash Amendment timeline. 1) Identify project locations 2) Secure funds in the form of general funds, bonds, or grants 3) Obtain City Council approval 4) Initiate preliminary engineering 5) Hire design consultant to develop detailed construction plans and construction cost estimates 6) Complete construction contractor bid and award process for construction phase 7) Construct project 8) Operation and maintenance will be in perpetuity. Funds and staff resources for this function will be approval by City Council as part of the City's annual budget. This strategy may be triggered as 1) interim goals are not met, 2) funding to address MS4 discharges is identified and secured, 3) staff resources are identified and secured, and 4) permits required by regulatory agencies are secured.	FY17+	Continuous – Ongoing				X	X			MS4	Wastewater Operations, Engineering, NPDES, contractor
<b>WMA Strategies (Optional Strategies, B.3.b.(2))</b>													
CV-33	Baseline Trash Assessment Study	The City is participating in a Baseline Trash Assessment Study with WMA Copermittees within the Focused Priority Area. The study will assess targeted geographic areas and include elements such as (1) an assessment of current conditions to provide a baseline to demonstrate progress, (2) identify high-priority areas for targeted strategy implementation, and (3) identification of potentially collaborative efforts with different jurisdictions. Implementation of additional strategies will be based on the results of this study and will be updated in the Annual Report.	FY16+	Continuous – Ongoing				X				Various	NPDES, SD Bay Watershed RPs in FPWQC area

**Table I.3.1 City of Chula Vista  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii)) <sup>1</sup>	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutant or Condition Addressed							Source <sup>2</sup>  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
					Bacteria	Nutrients	Metals	Trash <sup>3</sup>	Sediment	Flow	Habitat/ Wildlife		
CV-34	Promote and collaborate with water agencies and other groups to encourage implementation of water conservation programs that improve water quality by reducing over-irrigation with smart products or turf replacement and capturing rain water in residential areas.	Chula Vista works with the San Diego County Water Authority, Otay Water District, and Sweetwater Water Authority to provide classes to residents that encourage water smart landscaping and gardening. Funding secure for FY16.	Prior to FY16	Continuous – Ongoing						X		Residential	NPDES, San Diego County Water Authority, Otay Water District, Sweetwater Authority
CV-35	Offsite Alternative Compliance Option (WMAA)	The WMAA provides alternative compliance methods in lieu of meeting structural BMP design standards and/or hydromodification management criteria on the project site. The San Diego County Copermittees have collectively funded and provided guidance for development of a regional WMAA. Copermittees compiled a list of candidate projects that consider the numeric goals of the WMAs as well as projects previously identified in JRMPs and other regulatory documents. Funding for future fiscal years is contingent on annual budget approval by City Council.	Planning prior to FY16	TBD - As needed	X	X	X	X	X	X	X	Variable	NPDES, Land Development, Copermittees

**Table I.3.1 City of Chula Vista  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii)) <sup>1</sup>	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutant or Condition Addressed							Source <sup>2</sup>  (B.3.b.(1)(a)(ii))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))	
					Bacteria	Nutrients	Metals	Trash <sup>3</sup>	Sediment	Flow	Habitat/ Wildlife			
CV-36	Address and clean up pollutants from homeless encampments through Homeless Outreach Team. If a regional social services effort is established, support workgroup to provide sanitation and trash management for person experiencing homelessness and determine if the program is suitable and appropriate for jurisdictional needs to meet goals.	The City may participate jointly with other agencies as part of a regional program. Support a non-profit or consortium to provide sanitation services associated with hygiene as well as trash management for persons experiencing homelessness. This provision has been proposed as a method for preventing surface water usage for sanitation and bathing, as well as opportunity for outreach and referral by social service agencies. Trash management services will include providing trash bags, trash collection areas, and shower/sanitary facilities at centers which provide daytime shelter or on a mobile-basis for known transit camps. This strategy may be implemented at any time at the City's discretion if the following triggers are met: 1) funding to address MS4 discharges is identified and secured, 2) staff resources are identified and secured, 3) partners have been identified and formal MOUs have been developed, and 4) consensus and community support has been achieved. Resources necessary to implement this strategy include City staff to coordinate with the regional effort.	TBD	TBD				X				X	Homeless Encampments	Police Department, NPDES, Code Enforcement, Wastewater Operations
CV-37	Enhance and expand trash cleanups through community-based organizations involving target audiences.	Chula Vista partners with "I Love a Clean San Diego" on cleanup events, such as Creek to Bay, Coastal Cleanup, and Adopt a Canyon. Chula Vista also has its own cleanup event called Beautify CV Day. Funding secured for FY16. Dependent on budget availability.	Prior to FY16	Events occur throughout the year				X				X	Commercial, Industrial, Municipal, and Residential Areas	CLEAN Team
CV-38	Enhance school and recreation-based education and outreach.	Chula Vista works with "I Love a Clean San Diego" on a variety of community events a year for the Boys and Girls Club, schools, high school environment clubs, and adult organizations. Triggers include available budget and obtaining a contract to aid in enhancing education programs.	FY16-17	Annually	X	X	X	X	X	X	X	X	Commercial, Industrial, Municipal, and Residential Areas	NPDES, CLEAN Team

**Table I.3.1 City of Chula Vista  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii)) <sup>1</sup>	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutant or Condition Addressed							Source <sup>2</sup> (B.3.b.(1)(a)(ii))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
					Bacteria	Nutrients	Metals	Trash <sup>3</sup>	Sediment	Flow	Habitat/ Wildlife		
CV-39	Conduct and/or participate in special studies	Participate in special studies as applicable.											
	a. Reference watershed study	The San Diego Regional Reference Stream Study (currently being conducted by the Southern California Coastal Water Research Project). The study will develop numeric targets that account for “natural sources” to establish the concentrations or loads from streams in a minimally disturbed or “reference” condition. Occurs region-wide. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval.	FY15-16	Ongoing	X							N/A	San Diego Region Copermittees
	b. San Diego Bay Debris Study	The Trash Study is a comprehensive bay-wide study to help managers understand the current extent and magnitude of plastic-based debris accumulation and takes into account seasonal changes to better understand the plastic debris conditions throughout San Diego Bay and its upland contributing areas. Funding and resources were secured for FY2015.	Prior to FY16	One time			X					Various	SCCWRP, Regional Board, San Diego Coastkeeper, Port of San Diego, City of Imperial Beach
CV-40	Collaborate with regional education and outreach efforts.	Participate in regional education and outreach program along with other Copermittees. Triggers include opportunities and funding to participate in activities at a regional level.	FY15-16	As available	X	X	X	X	X	X	X	Commercial, Industrial, Municipal, and Residential Areas	San Diego Region Copermittees

Notes:

1. See Supplemental Attachment 1 to Appendix I-3 for BMPs required for applicable areas/sources.
2. High priority sources include: General Retail/Commercial Areas, including eating or drinking establishments; Medium priority sources include: General Industrial areas, homeless encampments, illegal dumping, institutional facilities, and roads and highways.
3. Orange-shaded cell indicates a highest/focused priority water quality condition (FPWQC).

**Table I.3.2 City of Chula Vista  
 Minimum Best Management Practices<sup>1</sup>**

No.	BMP Title	BMP Description	Pollutants or Conditions Addressed							
			Bacteria	Nutrients	Metals	Trash	Sediment	Dry Weather Flow	Oil & Grease	Organics
1	Eliminate illicit connections to the storm drain system.	Illicit connections are man-made physical connections to the storm drain system that convey an illicit discharge. Find and abate all illicit connections to the storm drain system through properly approved procedures, permits, and protocols.	x	x	x		x	x	x	x
2	Eliminate illicit non-storm water discharges.	Non-storm water (water other than rain) shall not be discharged to the City of Chula Vista's (City) storm drain system. To eliminate illicit discharges, do not allow any solid or liquid material except uncontaminated storm water to enter City storm drains, curb gutters along City streets, or any other part of the City's storm drain system. Non-storm water discharged to the storm drain system as a result of emergency or non-emergency firefighting activities, both emergency and non-emergency activities, is considered an illicit discharge if the City or the Regional Water Quality Control Board, San Diego region (RWQCB) identifies the discharge as a significant source of pollutants to receiving waters. Other limited exceptions may apply. During emergency situations, priority of efforts is directed toward life, property, and the environment (in descending order). The City's minimum BMPs should be implemented, but should not interfere with immediate emergency response operations or impact public health and safety.	x	x	x		x	x	x	x
3	Properly dispose of process and wash water.	All process water and wash water shall be contained, captured, and reused, or properly disposed of to the sanitary sewer, an appropriate waste hauler, or to landscaping or other pervious surfaces.	x	x	x	x	x	x	x	x
4	Eliminate the discharge of vehicle and equipment wash water.	This BMP is applicable to all industrial, commercial, and municipal facilities and activities, regardless of whether the activity is conducted by the facility owner/operator, lessee, contractor, or other persons. Water associated with washing activities shall not be allowed to enter City storm drains, curbs and gutters, or any other part of the City's storm drain system. When washing is conducted outside permanent designated wash areas, all wash water must be contained, captured, and disposed of appropriately. Designated washing areas may consist of a container, a berm, or a liner to collect and contain liquids and prevent runoff. Use of a control nozzle or similar mechanism is required to maximize control over the quantity of water used. Allowing contained water to evaporate is an acceptable method of disposal only if any remaining residue is removed to prevent future pollutant discharges. Captured wash water may be disposed through the sanitary sewer system with the approval of the City's Wastewater Engineering section. Contact the Wastewater Engineering section at (619)691-5021 for approval of any discharges to the sanitary sewer system; businesses are responsible for obtaining necessary permits. Wash water containing oil, paint, or other hazardous waste should be disposed of properly in accordance with applicable regulations. If only biodegradable soaps and uncontaminated water are used, wash water may be directed to onsite landscaped or pervious area(s) to infiltrate or evaporate, without resulting in erosion or runoff to the storm drain system or any adjacent property. This can be accomplished by washing the vehicle on a landscaped area or using a berm to direct wash water to a landscaped area.			x		x	x	x	x

<sup>1</sup> These BMPs are applicable to commercial, industrial, and municipal sources. Construction and Residential source BMPs related to the FPWQC (trash) include good housekeeping and waste management, which are similar to BMP Nos. 15,16, and 35. Please see the City of Chula Vista's JRMP document at: <http://www.chulavistaca.gov/departments/public-works/services/storm-water-pollution-prevention/documents-and-reports> for more details.

**Table I.3.2 City of Chula Vista  
 Minimum Best Management Practices  
 (continued)**

No.	BMP Title	BMP Description	Pollutants or Conditions Addressed								
			Bacteria	Nutrients	Metals	Trash	Sediment	Dry Weather Flow	Oil & Grease	Organics	
5	Properly dispose of water from fire sprinkler maintenance activities.	Fire sprinkler system discharges containing corrosion inhibitors, fire suppressants, or antifreeze shall be disposed through the sanitary sewer system, not the storm drain system. Fire sprinkler system discharges without corrosion inhibitors, fire suppressants, or antifreeze shall be disposed through the sanitary sewer, if practicable. When not practicable to discharge to the sanitary sewer system due to the presence of prohibited contaminants, the water shall be collected and disposed of by an appropriately certified party. When not practicable to discharge to the sanitary sewer system for reasons other than the presence of prohibited contaminants, the water shall not be discharged unless adequate precautions have been taken to prevent the transport of pollutants to the storm drain system.			X				X		
6	Eliminate irrigation runoff.	Irrigation runoff to the storm drain system shall be eliminated through proper landscape maintenance and watering practices. All irrigation water and associated pollutants from nurseries, garden centers, and similar facilities shall be prevented from reaching City storm drains, curb gutters along City streets, or any other part of the City's storm drain system.	X	X					X		
7	Properly dispose of discharges from swimming pools, spas, fountains, reflective pools, ponds, and filter backwash.	Swimming pool, spa, fountain, reflective pool, pond, and filter backwash water shall be properly disposed of to prevent pollutants from entering the storm drain system. Discharge swimming pool, spa, reflective pool, and fountain water to the storm drain system only if the water is dechlorinated, has a pH level in the 7-8 range, is within ambient temperature, has no algae or suspended solids, is not saline, and is discharged at a rate as to not cause flooding or downstream erosion.							X		
8	Control air conditioning condensation discharges.	Air conditioning condensation discharges shall be controlled from reaching City storm drains, curb gutters along City streets, or any other part of the City's storm drain system and are prohibited from entering the City's storm drain system unless the following BMPs are followed in order. 1. Air conditioning condensation should be directed to the sanitary sewer if allowed. Contact the Development Services Department's Building Services at (619) 691-5272 to obtain a building permit to direct the condensation to the sanitary sewer system. 2. Air conditioning condensation discharges should be directed to onsite landscaped or pervious area to infiltrate or evaporate, without resulting in erosion or runoff to the storm drain system or any adjacent property. Directing discharges to landscaping close to a building foundation is not recommended. 3. If the above BMP options are not feasible AND the discharge does not contain pollutants exceeding the California Toxics Rule (CTR), air conditioning condensation may enter the City storm drain system. Condensation must be proven to contain no pollutants that contribute to CTR water quality exceedances.			X				X		
9	Eliminate floor mat cleaning discharges.	Floor mats shall be cleaned in a manner such that there is no discharge to City storm drains, curb gutters along City streets, or any other part of the City's storm drain system. Indoor wash areas, mop sinks, or indoor floor drains may be designated as wash areas for floor mats if these areas drain to the sanitary sewer system.	X						X	X	X

**Table I.3.2 City of Chula Vista  
 Minimum Best Management Practices  
 (continued)**

No.	BMP Title	BMP Description	Pollutants or Conditions Addressed								
			Bacteria	Nutrients	Metals	Trash	Sediment	Dry Weather Flow	Oil & Grease	Organics	
10	Eliminate pumped groundwater, foundation, and footing drain discharges.	Pumped groundwater, including water from crawl space pumps is prohibited unless a separate National Pollutant Discharge Elimination System (NPDES) permit has been obtained to cover the discharge, or the RWQCB has determined in writing that no permit is needed. Discharges from foundation and footing drains that are at or below the groundwater table are also prohibited, unless covered by an NPDES permit, or the RWQCB has determined in writing that no permit is needed.							X		
11	Minimize rising groundwater, diverted stream flows, uncontaminated groundwater infiltration, springs, riparian habitat/wetland flows, potable water sources, and foundation/ footing drain discharges.	Discharges from rising groundwater, diverted stream flows, riparian habitat and wetlands, uncontaminated groundwater infiltration to the storm drain system, springs, and potable water sources are exempt unless they are identified as a source of pollutants to receiving waters by the City or the RWQCB.							X		
12	Regularly clean and maintain structural BMPs, including LID installations, to ensure proper performance.	BMPs implemented, including Low Impact Development (LID) and structural BMPs, must be inspected at a minimum annually, and properly operated and maintained. All installed LID or structural BMPs shall be inspected at a minimum of once annually for proper function and maintained to confirm the BMP is serving the purpose for which it was intended.	X	X	X	X	X			X	X
13	Protect unpaved areas, including landscaping, from erosion using vegetative or physical stabilization.	Exposed soils that are actively eroding or prone to erosion due to disturbance shall be protected from erosion. Significant accumulations of eroded soil shall be removed or contained to prevent sediment transport in runoff to the storm drain system.					X	X			
14	Regularly clean parking areas.	Paved parking lots, roads, and driveways located on the property shall be cleaned as needed to prevent pollutants from entering the City's storm drain system, including the curb and gutter. Sweeping is the preferred method of cleaning. Wet cleaning methods, such as mopping or power washing, may be substituted for sweeping if all wash water is contained, captured, and disposed of appropriately.			X	X	X			X	X
15	Implement good housekeeping to keep site free of trash and debris.	Outdoor areas shall be cleaned as needed to keep them free of accumulations of trash, sediment, litter, and other debris.	X		X	X	X				
16	Keep storm drain inlets and under drains free of sediment, trash, and debris.	Accumulated materials shall be removed from on-site storm drains and under drains at least once per year.	X	X	X	X	X			X	X

**Table I.3.2 City of Chula Vista  
 Minimum Best Management Practices  
 (continued)**

No.	BMP Title	BMP Description	Pollutants or Conditions Addressed							
			Bacteria	Nutrients	Metals	Trash	Sediment	Dry Weather Flow	Oil & Grease	Organics
18	Provide and maintain secondary containment to catch spills if storing potential liquid pollutants in outdoor areas.	Drums and other containers shall be kept in good condition and securely closed when not in use. Effective secondary containment shall be provided and maintained for all containers of liquid with the potential to leak or to spill onto outdoor areas to prevent leaks or spills from discharging pollutants to the storm drain system. Secondary containment shall also be provided for all liquids during transport to prevent spills due to leaks or punctures. A variety of methods are available, including but not limited to: containers, curbs, and vendor products. To maintain the effectiveness of secondary containment, regularly remove and appropriately dispose of spills, precipitation, or other liquids that accumulate in the secondary containment. Provide liquid storage containers with covers to prevent precipitation from accumulating in or causing overflows from the secondary containment. If evidence of spills due to inadequate containment is observed, the City enforcement official may specify a minimum required containment capacity. Other applicable regulations may apply to the use of secondary containment, especially for hazardous materials, which are regulated by the County of San Diego Department of Environmental Health.			X				X	X
19	Cover, contain, and/or elevate materials stored outside that may become a source of pollutants in storm water or non-storm water.	Materials stored outdoors shall be covered, contained, and/or elevated to prevent storm water and non-storm water from contacting and/or transporting materials and pollutants to the storm drain system. Some examples of cover are roofs, awnings, and tarps. Where coverage is not feasible or is cost prohibitive, alternative approaches such as installing berms around the stored materials, directing runoff to pervious areas, or installing treatment devices may be allowed. Note that installing structural coverage will usually require obtaining permits from the City prior to installation. To determine applicable regulations and whether a permit would be required, contact the Development Services Department's Building Services at (619) 691-5272.		X	X	X	X		X	X
20	Properly store and dispose of hazardous materials.	Hazardous materials and wastes shall be stored, managed, and disposed in accordance with federal, state, and local laws and regulations. Hazardous materials and wastes and their primary storage containers shall also be stored such that they will not come into contact with storm water, even if leaks or spills occur. Hazardous materials and wastes generated by business activities are additionally regulated by the County of San Diego Department of Environmental Health. Disposal of hazardous wastes using an authorized hazardous waste collection service is required. Store hazardous materials and wastes, and their primary storage containers, with sufficient cover and/or containment to prevent contact with storm water. See BMPs 18 and 19 for additional details regarding storage.			X					X
21	Label containers to prevent mishandling of hazardous materials and other potential pollutants.	Outdoor containers and storage areas of pollutants shall be labeled to facilitate proper material handling and spill response. Hazardous materials and wastes shall be clearly labeled in accordance with all applicable regulations.								X
22	Reduce the amount of liquid cleaning agents and solvents used.	Reduce potential for pollution from cleaning agents such as soaps and detergents used in any maintenance operations including vehicles, equipment, aircraft or ship cleaning, metal work, and painting practices. Use products other than liquid cleaning agents to the maximum extent practicable (MEP); Substitute cleaning methods such as wire brush scraping or using a bake oven. Reuse solvents and use sparingly; pre-soak parts in "dirty" solvents before placing in fresh solvent to reduce volume of solvent used.								X

**Table I.3.2 City of Chula Vista  
 Minimum Best Management Practices  
 (continued)**

No.	BMP Title	BMP Description	Pollutants or Conditions Addressed									
			Bacteria	Nutrients	Metals	Trash	Sediment	Dry Weather Flow	Oil & Grease	Organics		
23	Protect storage containers from being damaged by vehicles.	Prevent vehicle impact damage to storage containers by installing bollards, traffic barriers, fences, and curbs to protect containers stored in locations accessible to vehicles. Vehicles may damage storage containers leading to ruptures and cracks which may lead to significant spills and leaks.										X
24	Properly manage pesticides and fertilizers.	Pesticides and fertilizers shall be applied in strict accordance with manufacturer's label, as authorized by U.S. Environmental Protection Agency. Chemicals shall be stored safely in covered and contained areas. See BMPs 18 and 19 for additional details regarding storage. Waste products shall be disposed of in accordance with the manufacturer's label and applicable hazardous waste regulations. The use of integrated pest management (IPM) principles is encouraged to reduce or eliminate use of chemicals. For more information about integrated pest management, see the University of California Statewide IPM Program at <a href="http://www.ipm.ucdavis.edu">http://www.ipm.ucdavis.edu</a> .		X								X
25	Develop a written plan that identifies appropriate BMPs, including spill response, and includes procedures for proper implementation. <u>NOTE:</u> Only if required by an NPDES Permit or as instructed by the City.	A site-specific or mobile activity-specific written plan, called a BMP Plan shall be maintained that identifies all BMPs to be used and provides clear instruction on how to properly implement each BMP. The BMP Plan shall include written procedures for preventing and responding to spills appropriate in scale to facility activities and potential spills. The BMP Plan shall be appropriately scaled to the size of the facility and potential for discharges. The BMP Plan shall be updated as site conditions or activities change. The BMP Plan must include an employee training program. Facilities subject to regulations such as Spill Prevention, Control, and Countermeasures (SPCC) or Hazardous Materials Business Plan regulations should develop spill plans in accordance with guidance provided by State, City, and County emergency management departments. For facilities subject to storm water permitting pursuant to State Industrial General Permit regulations, the required Storm Water Pollution Prevention Plan (SWPPP) will meet this requirement.	X	X	X	X	X	X	X	X	X	X
26	Implement controls to minimize pollution from exposed outdoor work areas.	Activities that may generate pollutants shall be conducted in covered, contained areas, or equivalent measures taken to prevent the discharge of associated pollutants. In order to avoid contaminating storm water runoff, the following precautions shall be taken as appropriate: (1) move activities indoors;(2) cover areas where outdoor activities are performed, including building canopies; (3) protect areas where outdoor activities are performed from runoff from upstream areas, including building berms; (4) prevent spills or by-products from escaping contained areas; (5) do not conduct outdoor activities that may generate pollutants when it is raining; (6) protect storm drain inlets and ensure adequate spill response materials are readily available; and, (7) thoroughly clean outdoor work areas at least daily to remove accumulated sediment, debris, oil and grease, particulate matter, and other pollutants. Structural treatment devices shall also be installed to remove pollutants from contaminated runoff if source control BMPs are not effective.		X	X	X	X				X	X
27	Prevent or capture liquid leaks from vehicles or equipment.	Leaking vehicles or equipment shall be repaired promptly. Drip pans or other equivalent means shall be used to capture spills or leaks of oil and other fluids from vehicles awaiting maintenance and during maintenance activities. Captured fluids shall be disposed of in accordance with applicable hazardous materials regulations.			X						X	X

**Table I.3.2 City of Chula Vista  
 Minimum Best Management Practices  
 (continued)**

No.	BMP Title	BMP Description	Pollutants or Conditions Addressed							
			Bacteria	Nutrients	Metals	Trash	Sediment	Dry Weather Flow	Oil & Grease	Organics
28	Immediately clean up spills.	Spills shall be cleaned up immediately and prevented from entering the storm drain system. Dry cleaning methods such as the use of rags and absorbents are preferred cleaning methods. Spills that enter a storm drain and cannot be fully recovered shall be reported promptly to the City's Storm Water Hotline at 619-397-6000.	x		x				x	x
29	Maintain a readily accessible spill cleanup kit that is appropriate for the type of materials stored onsite.	Materials and equipment appropriate for the type and quantity of potential spills shall be kept onsite and with any mobile activities as a spill cleanup kit. Keep cleanup materials in close proximity to locations where spills may occur, with instructions for use clearly displayed.		x				x	x	x
30	Drain fluids from inoperable vehicles and store or dispose of appropriately.	Oil, antifreeze, and other fluids shall be drained from inoperable vehicles intended for recycling or long-term storage that are stored outside. Drained fluids shall be disposed of in accordance with applicable hazardous materials regulations.							x	x
31	Temporarily protect storm drains from non-storm water discharges while conducting activities that have the potential to result in a discharge.	If activities conducted cannot be fully contained or minor failures in containment would potentially result in discharges of non-storm water to the storm drain system, temporary measures shall be used to protect storm drains. Any activity-related materials that enter the storm drain system shall be removed promptly and disposed of appropriately (in accordance with other minimum BMPs).	x	x	x	x	x	x	x	x
32	Provide pollution prevention signage for storm drains.	Pollution prevention signage shall be provided for all onsite storm drain inlets and catch basins with prohibitive language (e.g., "No Dumping – Drains to <insert applicable creek/water body>"). Examples of storm drain signage include concrete stamps, painted stencils, signage, and the installation of ceramic or plastic tiles.	x	x	x	x	x	x	x	x
33	Provide pollution prevention signage for uncovered outdoor sources of pollutants.	A system to remind employees or contractors to complete required maintenance shall be provided for trash areas without overhead coverage, uncovered outdoor work areas, and other outdoor areas of the site that require frequent maintenance to mitigate pollution potential. Certain areas, such as uncovered trash areas or uncovered outdoor work areas, require frequent maintenance to keep them clean and minimize the potential to release pollutants. Because these areas require frequent maintenance, a system to remind applicable employees or contractors of the required maintenance is mandatory.		x	x	x	x		x	x
34	Train appropriate employees on storm water pollution prevention.	Initiation training and refresher training shall be provided to all employees with full or partial responsibility for BMP implementation on- or off-site. All such employees shall be familiar with the BMP Plan for on-site or mobile activity. Records of training shall be kept for at least three years, including topics, dates, and employee names, at a minimum, and shall be available upon request.	x	x	x	x	x	x	x	x
35	Keep trash/waste storage areas free of exposed trash, sediment, and debris.	Stored waste shall be protected from contact with storm water and non-storm water. Disposal areas for trash and other wastes shall be cleaned as frequently as necessary to keep these areas free of loose trash, litter, debris, liquids, powders, and sediment. Liquid waste, hazardous waste, medical waste, universal waste, and other items prohibited by current regulations shall not be placed in solid waste dumpsters. Dry cleaning methods such as sweeping are preferred. If wet cleaning methods are used, all wash water must be contained, captured, and disposed of appropriately. See BMP 4 for information on appropriate wet cleaning practices.	x			x				

**Table I.3.2 City of Chula Vista  
 Minimum Best Management Practices  
 (continued)**

No.	BMP Title	BMP Description	Pollutants or Conditions Addressed							
			Bacteria	Nutrients	Metals	Trash	Sediment	Dry Weather Flow	Oil & Grease	Organics
36	Protect waste storage areas from contact with storm water and non-storm water flows onto the property.	Stored trash and other wastes shall be protected from contact with storm water and non-storm water flows. Trash and other wastes shall be contained to prevent transport of trash off site, and to keep surrounding areas and on site storm drains free of trash and other wastes.	x			x				x
37	Cooking oil waste shall be managed to prevent illicit discharges.	Waste containers for oils, grease, fats, or tallow shall be kept indoors where feasible. Where not feasible, the waste containers shall be kept in a covered, contained area to prevent waste transport in runoff. Waste containers are required to be double walled or have secondary containment.	x							x
38	Properly store and dispose of green waste.	Green waste shall be properly stored and disposed of such that it will not be transported to the storm drain system by storm water or non-storm water runoff.	x	x			x			

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## I.4 CITY OF SAN DIEGO STRATEGIES AND FUNDING NEEDS

### I.4.1 Strategies

The City of San Diego (City) is currently implementing administrative policies, urban development management programs, and innovative pilot studies, and is investing in research for site locations for green infrastructure and other treatment BMPs throughout its jurisdiction in multiple watersheds. The City has identified water quality improvement strategies that are expected to provide the greatest benefits to the watershed and its residents, businesses, communities within the City’s jurisdictional boundaries.

Strategies were selected by evaluating the following considerations, in descending priority:

- Potential to reduce pollutant loads for the Highest Priority Conditions
- Potential to reduce loads for other pollutants (including Priority Conditions)
- Cost effectiveness
- Feasibility and ease of implementation
- Social impacts and benefits
- Other<sup>2</sup> impacts and benefits

The strategies that provide the best value, most sustainable return on investment, and greatest range of benefits were selected, as needed, as the City moves forward in its water quality improvement efforts. These strategies are consistent with those already identified in the Comprehensive Load Reduction Plans (CLRPs) for various TMDLs in the San Diego Region.

The City is currently developing a framework to evaluate the potential additional benefits the strategies may provide beyond improved water quality. These additional benefits may be financial, environmental, or societal. The strategies will be evaluated based on these benefits and assigned a potential benefit level which may guide future updates to the WQIP.

The cumulative storm water quality benefits of the strategies identified in this WQIP represent the level of effort needed to demonstrate progress toward achieving the WQIP interim and final numeric goals. It is important to note that these strategies are subject to change through the iterative, adaptive management process set forth in this Water Quality Improvement Plan. Through the adaptive management process the City will be able to implement strategies and assess their impact to water quality and use new

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<sup>2</sup> Other benefits refer to *additional* outcomes of a strategy beyond water quality improvements. Other benefits can include reduced air pollution, increased water conservation, aesthetics-induced property value increases, and increased business investments.

available information to refine, modify, remove, replace, or add strategies which will ensure the most effective suite of strategies are being implemented. Therefore, actual implementation of strategies is dependent upon both approval of funding in future annual budgets and adjustments that may occur as part of the iterative process. If the City elects to use the WQIP as a TMDL compliance document per Attachment E of the Municipal Permit, then the compliance analysis under Attachment E will be updated to ensure that any modifications to strategies will continue to achieve compliance with the TMDL targets.

The recommended strategies will be implemented by the City; they are not intended to be implemented by private entities (e.g., development, business, industry, etc.). Some of the City's strategies, such as development planning, may have implications for private entities. The City has also developed a schedule as a best estimate of the shortest amount of time required to plan and implement the strategies. A compliance analysis using a watershed model was conducted to identify the strategies required to be implemented to meet interim and final goals. The adaptive management process provides the framework to evaluate progress toward meeting the goals and allows for modification of strategies. As strategies are modified, the compliance analysis will be updated as needed to provide assurance that numeric goals will be met.

San Diego's jurisdiction includes a dense population and increased impervious urban land uses. The strategies address the Highest Priority Conditions in San Diego's jurisdiction within the San Diego Bay WMA and other jurisdictional areas outside of the boundaries where the Highest Priority Condition has been identified. For example, the City implements a trash mitigation strategy in western Otay River Valley Park. Although the City is focusing efforts in the Chollas Creek Watershed, many strategies presented are implemented in jurisdictional areas outside of Chollas Creek Watershed.

Strategies are presented within three categories: 1) jurisdictional strategies, 2) non-JRMP strategies (identified as "optional strategies" in the MS4 Permit), and 3) WMA strategies. The MS4 Permit requires the jurisdictions to identify the strategies being implemented as a part of JRMP Provisions E.2 through E.7. These "jurisdictional strategies" are required, but may be tailored to address the sources contributing to the highest priority water quality conditions as appropriate. Responsible Agencies have also identified additional strategies that fall outside of a JRMP category. These "optional strategies" are not required by MS4 Permit Provision E, but are either already being implemented, planned for implementation, or may be triggered for implementation in the future to address the highest priority water quality conditions. WMA strategies are those strategies that are implemented regionally or by multiple jurisdictions within the WMA. These strategies are also discussed in Section 4.9 of the Water Quality Improvement Plan.

For each of the JRMP inventories developed for its jurisdiction that may cause or contribute to the highest priority water quality conditions, BMPs that will be used, as appropriate, are presented in Attachment 1 to this appendix. BMP selection will be based on site-specific needs as these areas or sources are identified.

### **I.4.2 Funding Needs**

The City has developed projected funding needs that will be used to submit annual budget requests to secure the resources necessary to implement the strategies identified in this Water Quality Implementation Plan. Presentation of the funding needs is for internal City purposes. The categories presented, which include “JRMP” and “Water Quality Improvement Plan” categories, are defined differently from the “jurisdictional” and “optional” strategy terms used in the MS4 Permit. Strategies that are considered “jurisdictional” by the MS4 Permit may be included in the JRMP or Water Quality Improvement Plan funding needs categories. The jurisdictional strategies that are included in the Water Quality Improvement Plan funding needs category are enhancements to JRMP programs that will help meet TMDL and Water Quality Improvement Plan goals and are designated with an asterisk in the strategy table.

The City's Storm Water Division leads the City's efforts to protect and improve water quality and reduce flood risk. These activities include but are not limited to: public education, employee training, water quality monitoring, source identification, code enforcement, watershed management, and Best Management Practices development/implementation within the City's jurisdictional boundaries. The Storm Water Division is also tasked with providing the most efficient storm drain system operation and maintenance services including inspection, maintenance, and repair of storm drain systems in the public right of way and drainage easements. The complete list of strategies undertaken by the Storm Water Division is presented in this section.

The City has developed projected funding needs that will be used to submit annual budget requests to secure the resources necessary to comply with the Municipal Permit. These funding needs include four general categories:

1. Storm Water Division funding needs to implement day-to-day operational JRMP activities as required by Provision E in the Municipal Permit;
2. Storm Water Division funding needs for flood risk management programs associated with the JRMP, such as infrastructure repair and replacement;
3. Storm Water Division funding needs for activities managed by the Storm Water Division to meet the goals identified in the WQIP; and
4. Funding needs for City departments and divisions other than the Storm Water Division to implement day-to-day operational JRMP activities, as required by the Municipal Permit. Examples of JRMP activities include administration, training, and best management (BMP) implementation.

The City's Storm Water Division funding needs (which represent the first three categories above) are presented below as "City of San Diego" funding needs, but do not include funding needs for other City departments and divisions to implement required JRMP activities (category four above) because the recommended strategies included in this plan only apply to the City's Storm Water Division. For more information about the

funding needs for non-Storm Water Division departments and divisions, please refer to the fiscal analysis in the City's Jurisdictional Runoff Management Plan (Section 10). Table I.4.1 presents the projected funding needs to implement the San Diego Bay WMA Water Quality Improvement Plan through FY35. The compliance period for San Diego Bay is through FY31, when the final goals are expected to be met. Projected funding needs are included in Table I.4.1. Twenty year funding needs (FY16 – FY35) for the San Diego Bay WMA are presented for JRMP activities, flood risk management programs, and Water Quality Improvement Plan activities by funding source: the City's General Fund (GF) or Capital Improvement Projects (CIP) funds. The General Fund is generally used for nonstructural strategies, design support, and operations and maintenance (O&M) of structural projects. CIP funding is used during the design and construction phase of structural projects. The source of the funding needs is the Storm Water Division's 2015 Watershed Asset Management Plan (WAMP) Cost Update, which will be made available on the Storm Water Division's website<sup>3</sup> in July 2015.

Table I.4.1 illustrates the projected fiscal year annual funding needs over the 20-year compliance period for the Storm Water Division to implement its JRMP activities, flood risk management programs, and Water Quality Improvement Plan activities in the San Diego Bay WMA. Figure I-2 shows the projected fiscal year GF and CIP funding needs for each of these years. Figure I-3 and Figure I-4 show the projected fiscal year GF and CIP funding needs, respectively, by category for each of these years. The recommended strategies selected are presented in Table I.4.2. The City's schedule table is found in Table I.4.3.

### **I.4.3 Prioritization of Resources**

As part of the WQIP process, the City identified \$3.1 billion in funding needs to comply with Permit requirements for six watersheds over the next 20 years. To make the best possible use of limited resources, the City of San Diego will need to prioritize implementation and phasing of strategies between watersheds. Preference will be given to watersheds with regulatory drivers, such as TMDLs, that have mandated water quality targets and fixed schedules. These mandated water quality targets typically require more costly strategies that take longer to plan and implement. A proportionately lower level of resources will be implemented in non-TMDL watersheds, which have the flexibility to modify water quality targets and schedules. The ability to prioritize between watersheds will allow the City to focus time and resources needed to ramp up efforts and leverage existing programs to comply with TMDL and Permit requirements, which will ultimately lead to greater and more timely water quality improvements.

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<sup>3</sup> <http://www.sandiego.gov/stormwater/plansreports/>

**Table I.4.1  
 City of San Diego Projected Fiscal Year Funding Needs by Funding  
 Source and Category for the San Diego Bay WMA (FY16-35)<sup>1</sup>**

<b>General Fund</b>	
Water Quality Improvement Plan	\$45,551,046
JRMP	\$65,638,227
Flood Risk Management	\$229,061,828
<b>Sub Total General Fund:</b>	<b>\$340,251,101</b>
<b>CIP</b>	
Water Quality Improvement Plan	\$129,782,660
JRMP	\$0
Flood Risk Management	\$412,767,405
<b>Sub Total CIP:</b>	<b>\$542,550,065</b>
<b>20 Year San Diego Bay WMA Total Need:</b>	<b>\$882,801,166</b>

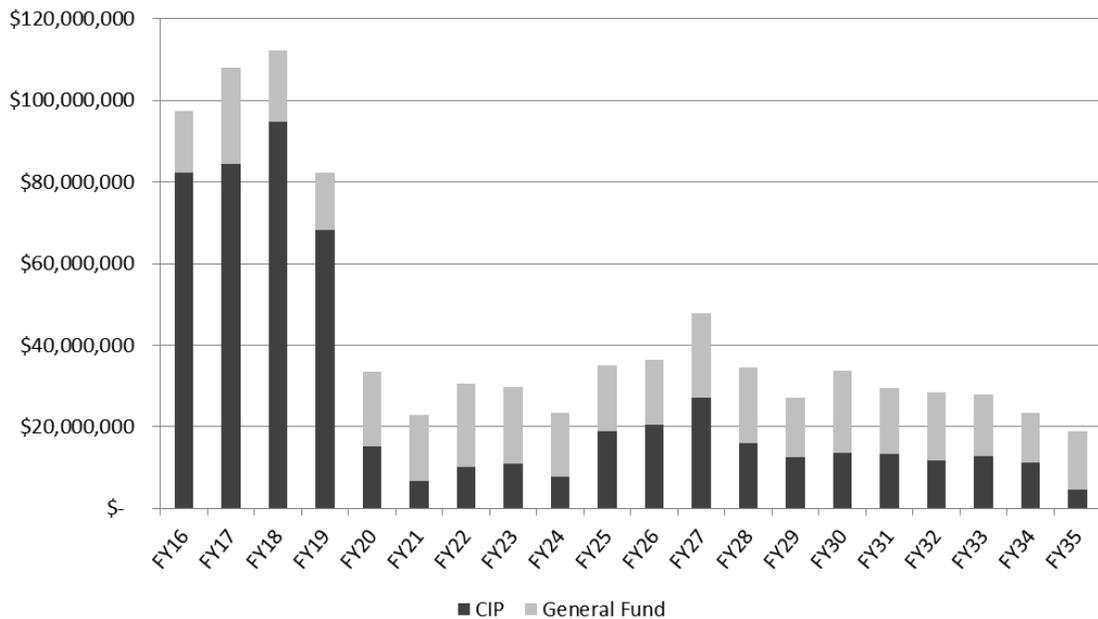
Note:

1. Does not include funding needs for other City of San Diego Departments or Divisions to implement JRMP required activities.

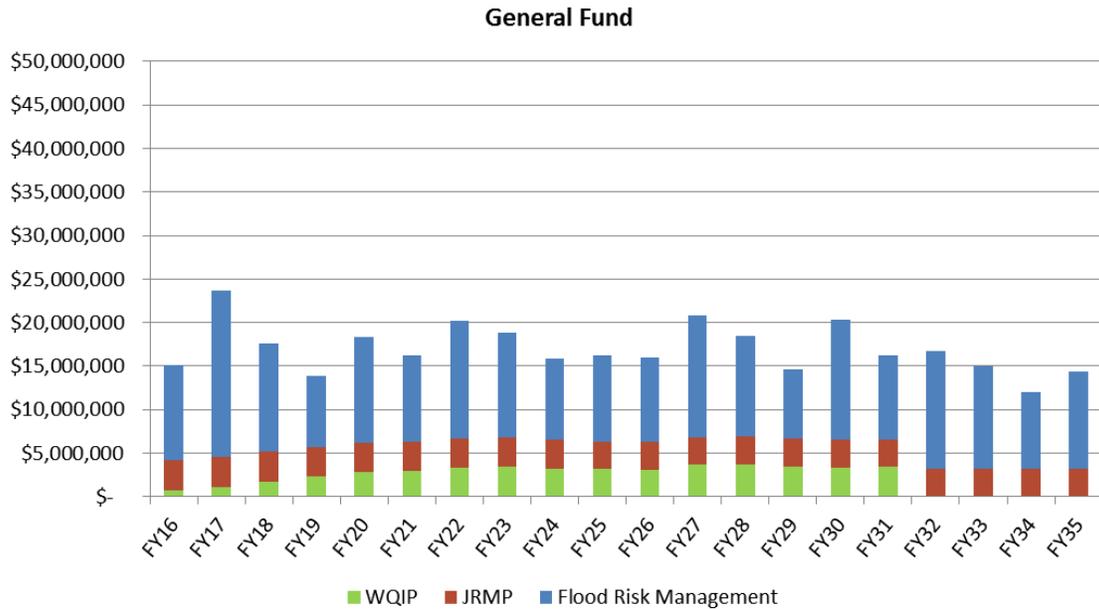
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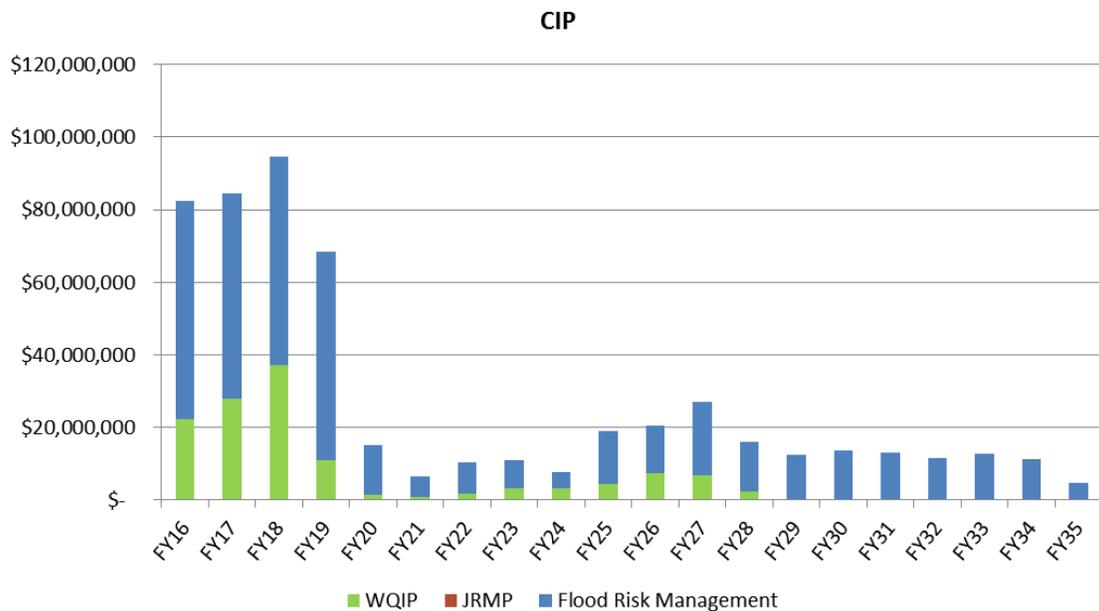
**Figure I.4.1**  
**City of San Diego Projected Fiscal Year Annual Funding Needs by Category for the San Diego Bay WMA**



**Figure I.4.2**  
**City of San Diego Projected Fiscal Year Annual Funding Needs by Funding Source for the San Diego Bay WMA**



**Figure I.4.3**  
**City of San Diego Projected Fiscal Year Annual General Fund Funding Needs for the San Diego Bay WMA**



**Figure I.4.4**  
**City of San Diego Projected Fiscal Year Annual CIP Funding Needs for the San Diego Bay WMA**

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
Orange shaded cells in the "Pollutants Addressed" column indicate the highest priority water quality conditions for this WMA. Orange shaded cells in the "Source" column indicate those strategies that provide the greatest benefit to reducing pollutants in the priority areas or sources causing or contributing to the highest priority water quality conditions in this WMA (B.3.b.(1)(a)(i)). The sources identified in the "Source" column reflect categories of sources identified for the entire jurisdiction. Refer to Section 3 for WMA-specific, high, medium, and low sources. Strategy ID's with an asterisk indicate those strategies that are considered "jurisdictional" in the MS4 Permit, but are considered enhancements to the JRMP to target highest priority water quality conditions.														
<b>JRMP (E.2-E.7) Strategies (E.3.b.(1)(a))</b>														
<b>E.3 Development Planning</b>														
<b>All Development Projects</b>														
CSD-1	Establish guidelines and standards for all development projects; provide technical support related to implementation of source control BMPs to minimize pollutant generation at each project and implement LID BMPs to maintain or restore hydrology of the area or implement easements to protect water quality, where applicable and feasible. Includes internal coordination and collaboration between City departments (DSD, PWD, and Engineering) to improve success and long-term benefits of BMPs.	Refer to JRMP Section 4. All high priority projects will be inspected annually prior to the rainy season. 20 percent of all projects will be inspected annually. Maintenance inspections include examination of all structural BMPs at a project to verify that each structural BMP is working, being maintained properly, and is in compliance with all applicable City ordinances and permits.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Land Development	T&SW with DSD, PWD, BIA, NGOs, Copermittees, and Engineering Community
CSD-1.1	Develop Design Standards for Public LID BMPs.	Improve quality of design to ensure efficiency and reliability in public designs.	Jurisdictional	FY14-FY15	Continuous- As needed	X	X	X	X	X	X	X	Land Development	T&SW with DSD, PWD, BIA, NGOs, Copermittees, and Engineering Community

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-1.2	Outreach to impacted industry regarding minimum BMP requirement updates.	Affects commercial, industrial, and residential development.	Jurisdictional	FY15	Continuous- As needed	X	X	X	X	X	X	X	Commercial, Industrial, and Residential Development Areas	TBD
CSD-2*	Train staff on LID regulatory changes and LID practices.	Formal training is required for all staff involved in development plan review to increase knowledge of LID BMPs. Goal of training associated with LID practices and regulations is to promote LID implementation and to avoid adverse conditions such as trees planted within swales, or planned drainage patterns which obstruct or inhibit LID performance.	Jurisdictional	FY16	Continuous- As needed	X	X	X	X	X	X	X	Land Development	T&SW with DSD, PWD, BIA, NGOs, Copermittees, and Engineering Community
CSD-3*	Amend municipal code and ordinances, including zoning ordinances, to facilitate and encourage LID opportunities to support compliance with the MS4 Permit and TMDLs in a reasonable manner. Ensure consistency with the City of San Diego's BMP Design Manual. Update the Storm Water Standards Manual accordingly.	Municipal codes and ordinances will be brought to City Council for consideration to encourage LID implementation (e.g., runoff detention and filtration using natural filters and stormwater retention for reuse). LID stormwater management will be encouraged in proposed codes and ordinances associated with development and redevelopment projects, which are brought to City Council for consideration.	Jurisdictional	FY15	Continuous- As needed	X	X	X	X	X	X	X	Land Development	T&SW with DSD, PWD, BIA, NGOs, Copermittees, and Engineering Community
CSD-4	Provide technical education and outreach to the development community on the design and implementation requirements of the MS4 Permit and Water Quality Improvement Plan requirements.	Technical education and outreach to the development community includes outreach on design standards, City design manuals, and the WMAA.	Jurisdictional	Prior to FY16	Continuous- Ongoing	X	X	X	X	X	X	X	Land Development	T&SW with DSD

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
<b>Priority Development Projects (PDPs)</b>														
CSD-5	For PDPs, administer a program and provide technical support to other City departments to ensure implementation of on-site structural BMPs to control pollutants and manage hydromodification by developing City wide storm water development standards and design guidelines.	Administer a program in coordination with other City departments to promote and confirm a thorough understanding of requirements for implementing structural BMPs that control pollutants and manage hydromodification. Includes requirements to confirm proper design and construction through processes controlled by other City departments. Please see Attachment 1 for details on PDP related BMPs that will be implemented to address sources causing or contributing to the HPWQC.	Jurisdictional	FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Land Development, Hydromodification	T&SW with DSD, PWD, BIA, NGOs, Copermittees, and Engineering Community
CSD-5.1	Institute a program to verify and enforce maintenance and performance of treatment control BMPs.	Refer to JRMP Section 4.5. The Storm Water Division is responsible for annually verifying that all structural BMPs within its inventory are being properly maintained. The Storm Water Division performs verification through an Annual Maintenance Verification mailing and a direct maintenance inspection program. Parties responsible for maintenance of structural BMPs are required to complete and sign the Annual Maintenance Verification, certifying that the structural BMPs are being properly maintained. Direct maintenance inspections will be performed at all projects for which an Annual Maintenance Verification Form was not completed. All high priority projects will be inspected annually prior to the rainy season. 20 percent of all projects will be inspected annually. Medium and low priority projects will not require inspection if they have completed their Annual Maintenance Verification form, unless they are part of the 20 percent of projects that are annually inspected.	Jurisdictional	FY16	Continuous-Ongoing	X	X	X	X	X	X	Land Development	T&SW with DSD, PWD, BIA, NGOs, Copermittees, and Engineering Community	

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-6*	Update BMP Design Manual procedures to determine nature and extent of storm water requirements applicable to development projects and to identify conditions of concern for selecting, designing, and maintaining appropriate structural BMPs.	Refer to JRMP Section 4.	Jurisdictional	FY15	Continuous every 5 years/ permit cycle	X	X	X	X	X	X	X	Land Development	T&SW with DSD, PWD, BIA, NGOs, Copermittees, and Engineering Community
CSD-6.1*	Amend BMP Design Manual for trash areas. Require full four-sided enclosure, siting away from storm drains and cover. Consider the retrofit requirement.	Amend BMP Design Manual and zoning standards/requirements which address reduction of pollutants for common areas of trash build-up (e.g. restaurants, supermarkets, "big box" retail stores with food, pet stores). Most effective method for source control of bacteria and trash is to employ four-sized trash enclosures with a cover over trash areas.	Jurisdictional	FY15	Completed within schedule	X		X	X			X	Waste Disposal	T&SW with DSD, PWD, BIA, NGOs, Copermittees, and Engineering Community
CSD-6.2*	Amend BMP Design Manual for animal-related facilities, such as such as animal shelters, "doggie day care" facilities, veterinary clinics, breeding, boarding and training facilities, groomers, and pet care stores.	Amend BMP Design Manual and zoning requirements (including retrofits) to provide supplemental standards for animal facilities (including animal shelters, dog daycares, veterinary clinics, groomers, pet car stores, and breeding, boarding, and training facilities). Supplemental standards may include requiring covered trash enclosures, identification of landscaped relief areas on site plans, ensuring drainage connections and treatment swales for areas that will not drain to the sanitary sewer, as well as inspection of grading, drainage, and landscaping for outdoor exercise areas.	Jurisdictional	FY15	Completed within schedule	X	X		X	X	X		Animal Facilities	T&SW with DSD, PWD, BIA, NGOs, Copermittees, and Engineering Community

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-6.3*	Amend BMP Design Manual for nurseries and garden centers.	Amend BMP Design Manual to provide supplemental standards for plant nurseries and garden centers. Standards will focus on reducing irrigation runoff, and loading of sediment, pesticides, and nutrients. Measures may include: covered outdoor storage, green waste management BMPs, improved irrigation efficiency to reduce dry-weather runoff, and containment of runoff from impervious areas where plants and materials are stored.	Jurisdictional	FY15	Completed within schedule	X	X			X	X		Nurseries and Green houses, Irrigation Runoff	T&SW with DSD, PWD, BIA, NGOs, Copermittees, and Engineering Community
CSD-6.4*	Amend BMP Design Manual for auto-related uses.	Amend BMP Design Manual to provide supplemental standards for automotive-related uses to reduce loading of metals, oils, grease, and trash. Measures may include: four-sized covered trash enclosures, and careful review of auto-related usage areas (e.g. garage bays at repair shops) for grading, drainage, and drain connections to sanitary sewer systems.	Jurisdictional	FY15	One time	X		X	X	X	X		Automotive	T&SW with DSD, PWD, BIA, NGOs, Copermittees, and Engineering Community
CSD-7*	Develop and administer an alternative compliance program for on-site structural BMP implementation (includes identifying Watershed Management Area Analysis [WMAA] candidate projects). Refer to Section 4.2.5.	Refer to JRMP Section 4.2.3.1.	Jurisdictional	FY15	Continuous-Ongoing	X	X	X	X	X	X		Land Development	T&SW with DSD, PWD, BIA, NGOs, Copermittees, and Engineering Community

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
<b>E.4 Construction Management</b>														
CSD-8	Administer a program to oversee implementation of temporary BMPs that control sediment and other pollutants during the construction phase of projects. Includes requirements to inspect at appropriate frequencies and effectively enforce requirements through process controlled by other City departments.	Refer to JRMP Section 5. Inspections performed by the City or City staff provide verification that each site is in conformance with the Construction Storm Water BMP Performance Standards in the Storm Water Standards Manual. Inspections are tracked to ensure that they meet the minimum inspection frequencies. High priority active and inactive sites are inspected bi-weekly during the rainy season. Medium priority sites are inspected monthly during the rainy season. Low priority sites are inspected as-needed during the rainy season. All sites are inspected as-needed during the dry season. Please see Attachment 1 for details on construction BMPs that will be implemented to address sources causing or contributing to the HPWQC.	Jurisdictional	FY16	Continuous-Ongoing			X	X	X	X		Construction Areas	T&SW with DSD, PWD, BIA, NGOs, Copermitees, and Engineering Community
<b>E.5 Existing Development</b>														
<b>Commercial, Industrial, Municipal, and Residential Facilities and Areas</b>														
CSD-9	Administer a program to require implementation of minimum BMPs for existing development (commercial, industrial, municipal, and residential) that are specific to the facility, area types, and PGAs, as appropriate. Includes inspection of existing development at appropriate frequencies and using appropriate methods.	Refer to JRMP Sections 6, 7, and 8. All industrial and commercial areas are inspected once within the Permit term (five years). At a minimum, 20 percent of industrial and commercial areas receive onsite inspections every year. Municipal facilities are inspected twice annually, once prior to the rainy season, and once during the rainy season. Residential management areas (RMAs) within the City are to be inspected once within the Permit term, at a minimum. Please see Attachment 1 for details on updated minimum BMPs that will be implemented to address sources causing or contributing to the HPWQC.	Jurisdictional	FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Commercial, Industrial, Municipal, and Residential Areas	T&SW with DSD, PUD, & PWD

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-9.1	Update minimum BMPs for existing residential, commercial, and industrial development. Specific updates to BMPs include required street sweeping, catch basin cleaning, and maintenance of private roads and parking lots in targeted areas.	Refer to JRMP Appendix IX. Please see Attachment 1 for details on updated minimum BMPs that will be implemented to address sources causing or contributing to the HPWQC.	Jurisdictional	FY15	Continuous every 5 years/ permit cycle	X	X	X	X	X			Residential, Commercial, and Industrial Areas	T&SW
CSD-9.2	Outreach to property managers and trash haulers to elevate the emphasis of power washing as a pollutant source.	Emphasis will be placed on non-compliant washing as an enforceable violation. Will occur city-wide in residential, commercial, and industrial areas.	Jurisdictional	FY15	Continuous-Ongoing	X	X	X	X	X			Residential, Commercial, and Industrial Areas	T&SW
CSD-9.3	Implement property based inspections.	Property-based inspections increase awareness and responsibility for individual properties to tackle issues associated with trash, landscapes, and parking areas. Expanding beyond the business-level inspections will achieve different and more effective opportunities for education, outreach, inspection, and enforcement to encourage water conservation strategies. Inspection frequency dependent on type of facility. See CSD-9 for inspection frequency.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X		Commercial, Industrial, Municipal, and Residential Areas	T&SW
CSD-9.4	Review policies and procedures to ensure discharges from swimming pools meet permit requirements.	Verify and bring to City Council for consideration an update (as needed) for the City's Municipal Code (43.0301) to meet new permit requirements for swimming pool discharges.	Jurisdictional	FY15	Continuous- As needed						X		Residential and Municipal Areas	T&SW, City Attorney (Civil & Criminal)

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-10*	Promote and encourage implementation of designated BMPs for residential and non-residential areas.	Landscape-based rebates are a "gateway" for adoption of other beneficial practices and are one of the nonstructural methods which address impacts from single-family residential areas (City of San Diego 2011 program development background study). Residential incentives can include: education and training (neighborhood watershed field days), and aggressive subsidies or rebates for grass replacement and rainwater harvesting. Existing programs will be expanded overall, and also have targeted expansion within specific subwatershed, particularly with highest water quality priority conditions. Will occur city-wide in residential, commercial, and industrial areas.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Residential and Commercial Areas	T&SW with DSD, PUD, PWD, MWD, CWA & local water agencies
<b>MS4 Infrastructure</b>														
CSD-11	Implementation of operation and maintenance activities (inspection and cleaning) for MS4 and related structures (catch basins, storm drain inlets, channels as allowed by resource agencies, detention basins, pump stations, etc.) for water quality improvement and for flood control risk management.	Refer to JRMP Section 7. Storm drain inlets are inspected at least once per year, and cleaned when accumulated materials are present. Other MS4 and related structures are inspected as needed.	Jurisdictional	FY16	Continuous-Ongoing	X		X	X	X			Outfalls, Flood Control Structures	T&SW
CSD-11.1*	Enhanced catch basin cleaning to increase pollutant removal (up to 4 times per year) in the rainy season.	To increase pollutant load removal, catch basins will be cleaned up to four times per year in the rainy season. The City of San Diego's pilot study found that major pollutants may vary from neighborhood to neighborhood (yard waste versus trash and sediment). Implementation may be adapted based on catch basin record keeping and cleaning optimization. Increase in frequency will be phased over 4 Fiscal Years.	Jurisdictional	FY16	Continuous-Ongoing	X		X	X	X			Outfalls, Flood Control Structures	T&SW

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-11.2	Increased frequency of catch basin inspection and as-needed cleaning.	For every segment of channel that is cleared, the City will conduct an inspection and as-needed cleaning of every catch basin within 100 feet of the cleared segment of channel. Additional inspection and as-needed cleaning will occur every three months for one year after the segment of channel is cleared.	Jurisdictional	FY13	Completed within schedule in 5 years (ends FY18)	X		X	X	X			Outfalls, Flood Control Structures	T&SW
CSD-11.3	Proactively repair and replace MS4 components to provide source control from MS4 infrastructure.	In order to limit inflow of pollutants and reduce pollutant loads, proactive measures will be taken to improve, repair, and replace MS4 components. The City of San Diego will start a multi-year program of repairing and replacing storm drain pipes to reduce sediment loading to the MS4. Development of an assessment management program and bond issues will be addressed. Exploration of daylighting pipes will take place where feasible and appropriate.	Jurisdictional	FY16	Continuous-Ongoing	X	X	X		X			Outfalls, Flood Control Structures	T&SW
CSD-11.4	Replacement of hard assets.	Includes needed replacement of storm drains and structures.	Jurisdictional	FY16	Continuous-Ongoing	X	X	X		X			Outfalls, Flood Control Structures	T&SW
CSD-12	Coordinate with other City departments (PUD) to implement controls to prevent infiltration of sewage into the MS4 from leaking sanitary sewers.	Refer to JRMP Section 7.	Jurisdictional	FY16	Continuous-Ongoing	X	X			X			Sewer Infrastructure	T&SW with PUD
CSD-12.1*	Identify sewer leaks and areas for sewer pipe replacement prioritization.	Risk assessment to include identifying targeted areas (age, location, proximity to MS4), coming up with methodology, pilot, desktop exercise/analysis.	Jurisdictional	FY16	Continuous- As needed	X	X			X			Sewer Infrastructure	T&SW with PUD
<b>Roads, Streets, and Parking Lots</b>														
CSD-13	Implement operation and maintenance activities for public streets, unpaved roads, paved roads, and paved highways.	Refer to JRMP Section 7.	Jurisdictional	FY16	Continuous-Ongoing	X	X	X	X	X			Streets, Roads, and Highways	T&SW

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-13.1	Outreach to street sweeping enhancement-targeted areas.	Division staff will conduct a thorough education and outreach effort beginning months in advance of the expansion of sweeping routes. Staff will work with the affected Council offices, community stakeholders, non-governmental organizations and community groups to build community awareness and acceptance of the enhanced sweeping program.	Jurisdictional	FY16	Continuous-Ongoing	X	X	X	X	X			Streets, Roads	T&SW
CSD-13.2*	Enhance street sweeping through equipment replacement (replace mechanical sweepers with regenerative air sweepers) and route optimization (sweep all routes twice per month) in targeted areas.	Following outreach and posting, street sweeping efforts will be increased in target areas (those with sediment or metals as a highest priority water quality conditions). Replacement of street sweeping equipment with high-efficiency regenerative air and vacuum-assisted sweepers over time is expected to further increase load reductions (even if current routes and frequencies remain unchanged).	Jurisdictional	FY17	Continuous-Ongoing	X	X	X	X	X			Streets, Roads	T&SW
CSD-13.3*	Initiate sweeping of medians on high-volume arterial roadways.	Medians of roadways are also a potential source of pollutants. Consider implementing or increasing sweeping of medians. Consider mechanical and hand sweeping techniques.	Jurisdictional	FY17	Continuous-Ongoing	X	X	X	X	X			Streets and Roads	T&SW
CSD-13.4	Implement additional street sweeping (Settlement Agreement).	City shall increase street sweeping frequency by prioritizing high traffic commercial routes adjacent to maintained channel with vacuum-assisted sweeper for every 400 linear feet of vegetation that is removed (except for removal of invasive species, e.g., Arundo) within a drainage area. Sweeping shall be conducted in median areas that are not subject to regular sweeping routes, and shall occur at a frequency of at least once per quarter for one calendar year after maintenance. Funding and resources were secured for FY2013. Funding for future fiscal years is contingent on annual budget approval by City Council.	Jurisdictional	FY13	Completed within schedule in 5 years (ends FY18)	X	X	X	X	X			Streets, Roads	T&SW

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
<b>Pesticides, Herbicides, and Fertilizer BMP Program</b>														
CSD-14	Require implementation of BMPs to address application, storage, and disposal of pesticides, herbicides, and fertilizers on commercial, industrial, and municipal properties. Includes education, permits, and certifications.	Refer to JRMP Sections 7, 8, and 9.	Jurisdictional	FY16	Continuous-Ongoing		X					X	Commercial, Industrial, and Municipal Areas; Landscaping Areas	T&SW with Parks and Rec
<b>Retrofit and Rehabilitation in Areas of Existing Development</b>														
CSD-15	Development of a strategy and identification of candidate areas of existing development necessary for implementing retrofit projects and facilitate the implementation of such projects.	Refer to JRMP Appendix XIX. The Offsite Alternative Compliance Program will include methods for identifying and assessing potential retrofit projects in existing development areas. Retrofit project selection will be based upon a variety of factors including proximity to high priority water quality conditions, potential pollutant load removal effectiveness, and feasibility of implementation. The program will include protocols related to funding mechanisms for project construction and long-term maintenance, payment and credit structures, and water quality equivalency standards. Specific retrofit projects are included in the Non-JRMP, Structural Strategies categories.	Jurisdictional	FY18	Continuous-Ongoing	X	X	X	X	X	X	X	Land Development	T&SW with DSD, PWD, BIA, NGOs, Copermittees, and Engineering Community
CSD-16	Development of a strategy and identification of candidate areas necessary to implement stream, channel, or habitat rehabilitation projects and facilitate implementation of such projects.	Refer to JRMP Appendix XIX. The Offsite Alternative Compliance Program (Section 9.2 and Appendix C) will include methods for identifying and assessing potential stream, channel, or habitat rehabilitation projects in existing development areas. Rehabilitation project selection will be based upon a variety of factors including existing stream or habitat degradation, potential future cumulative stream or habitat impacts, and feasibility of implementation. The program will include protocols related to funding mechanisms for project construction and long-term maintenance, payment and credit structures, and water quality equivalency standards.	Jurisdictional	FY18	Continuous-Ongoing	X	X	X	X	X	X	X	Land Development	T&SW with DSD, PWD, BIA, NGOs, Copermittees, and Engineering Community

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
<b>E.2 Illicit Discharge, Detection, and Elimination (IDDE) Program</b>														
CSD-17	Implement Illicit Discharge, Detection, and Elimination (IDDE) Program per the JRMP. Requirements include: maintaining an MS4 map, using municipal personnel and contractors to identify and report illicit discharges, maintaining a hotline for public reporting of illicit discharges, monitoring MS4 outfalls, and investigating and addressing any illicit discharges.	Refer to JRMP Section 3. The City must visually inspect at least 500 identified and prioritized major MS4 outfalls at least annually during dry weather conditions. Inspections of major MS4 outfalls conducted in response to public reports and staff or contractor reports and notifications may count toward the required visual inspections of MS4 outfall discharge monitoring stations. Please see Attachment 1 for details on how the IDDE Program will address sources causing or contributing to the HPWQC.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Irrigation Runoff, SSOs, Commercial, Industrial, Municipal, and Residential Areas	T&SW
<b>E.7 Public Education and Participation (B.3.b(1)(a)(iii))</b>														
CSD-18	Implement a public education and participation program to promote and encourage development of programs, management practices, and behaviors that reduce the discharge of pollutants in storm water prioritized by high-risk behaviors, pollutants of concern, and target audiences.	Refer to JRMP Section 9.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Variable	T&SW
CSD-18.1	Continue implementation of a Pet Waste Program.	Pet Waste Program includes outreach on "Scoop the poop", installation of posts for dispensers, distribution of lawn signs, and attendance at dog-related community activities.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X						Residential Areas	T&SW with Parks and Rec
CSD-18.2	Promote and encourage implementation of designated BMPs in commercial and industrial areas.	Provide education and outreach on BMPs for commercial businesses and industrial facilities. Will occur city-wide in non-residential areas.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Commercial and Industrial Areas	T&SW with PUD; Funding: Prop 84 and water districts (MWD)

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-18.3*	Expand outreach to homeowners' association (HOA) common lands and HOA incentives.	Approaches to consider include: offering incentives to HOAs and maintenance districts to adopt water-conserving/efficiency and stormwater-reduction changes to their landscapes, irrigation, and maintenance; conducting workshops with property managers; providing supplemental standards, inspection, or enforcement for HOA-managed properties.	Jurisdictional	FY16	Continuous-Ongoing	X	X	X	X	X	X	Residential Areas, Irrigation Runoff	T&SW	
CSD-18.4*	Develop an outreach and training program for property managers responsible for HOAs and maintenance districts.	Approaches to engage HOAs and property managers include: conducting workshops with property managers, providing supplemental standards, inspections or enforcement around HOA properties, and offering incentives to HOAs and maintenance districts to adopt changes to landscapes, irrigation, or maintenance which promote water conservation or stormwater reduction. Property managers are also a target for enhanced outreach.	Jurisdictional	FY16	Continuous-Ongoing	X	X	X	X	X	X	Residential Areas, Irrigation Runoff	T&SW	
CSD-18.5	Enhance school and recreation-based education and outreach.	Develop curriculum and establish distribution in public schools. Includes education on water conservation.	Jurisdictional	FY15	Continuous-Ongoing	X	X	X	X	X	X	Irrigation Runoff	T&SW, PUD with community-based organization	
CSD-18.6	Develop education and outreach to reduce irrigation runoff.	Example approaches to reduce or eliminate irrigation runoff may include: education and outreach, prohibition, enhanced enforcement of existing prohibitions, and pilot projects such as the City of Del Mar's pilot door hanger project.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	Irrigation Runoff	T&SW with PUD	
CSD-18.7*	Develop regional training for water-using mobile businesses.	Consider development of supplemental standards for mobile businesses including: covered trash enclosures, careful review of washing areas (grading, drainage, landscaping, sanitary sewer system connectivity), and appropriate signage (either through zoning for retrofits or "best fix" approaches, or through BMP Design Manual standards). Businesses may include carpet cleaners, tile installers, plumbers, etc.	Jurisdictional	FY16	Continuous-Ongoing	X	X	X	X	X	X	Commercial Areas, Mobile Businesses	T&SW	

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-18.8*	Enhance education and outreach based on results of effectiveness survey and changing regulatory requirements.	Use effectiveness surveys to enhance existing education and outreach programs while proactively keeping up with and incorporating changing regulatory requirements.	Jurisdictional	FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Variable	T&SW
CSD-18.9	Continue to promote and encourage implementation of Integrated Pest Management (IPM) for residents and businesses.	The City will continue to provide education on IPM techniques during presentations and on the City's Think Blue website.	Jurisdictional	Prior to FY16	Continuous-Ongoing		X					X	Residential, Commercial, and Industrial Areas	T&SW
CSD-18.10*	Improve consistency and content of websites to highlight enforceable conditions and reporting methods.	Websites will be updated to provide a user-friendly format and clarity for stormwater violations, conditions which citizens can and should report, and how to make such reports. Examples of reports for common incidents will be developed and posted which may vary locally and regionally. Photographs of allowable practices as well as illegal practices should be shown for utmost clarity. Displaying hotline numbers prominently on the website and near the photographs of illegal practices will ensure that those seeking to report will be able to do so easily. Also ensure hotline number and website are searchable and can be retrieved by simple internet searches.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Variable	T&SW
<b>E.6 Enforcement Response Plan</b>														
CSD-19	Continue to implement escalating enforcement responses to compel compliance with statutes, ordinances, permits, contracts, orders, and other requirements for IDDE, development planning, construction management, and existing development in the Storm Water Code Enforcement Unit's Standard Operating Procedures (SOPs) - Enforcement Response Plan.	Refer to JRMP Appendix XIII.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Variable (See specific programs)	T&SW with PUD, other City enforcement compliance programs

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-19.1*	Increase enforcement of irrigation runoff.	Increased enforcement policies against irrigation runoff will be established in tandem with the education and outreach programs on how these actions lead to pollutant loading. By shifting to property-based inspections irrigation runoff can be handled as enforceable violations once the public is well-informed.	Jurisdictional	FY16	Continuous-Ongoing	X	X	X	X	X	X		Irrigation Runoff	T&SW
CSD-19.2*	Increase enforcement of water-using mobile businesses.	In addition to education, pollution associated with mobile business sources can be handled through policy, code development, inspections of business practices, and enforcement.	Jurisdictional	FY16	Continuous-Ongoing	X	X	X	X	X	X		Commercial Areas, Mobile Businesses	T&SW
CSD-20*	Increase enforcement of all minimum BMPs for existing residential, commercial, and industrial development.	Increased enforcement of existing development minimum BMPs.	Jurisdictional	FY16	Continuous- As needed	X	X	X	X	X	X		Residential, Commercial, and Industrial Areas	T&SW
CSD-21*	Increase enforcement associated with property-based inspections.	Shifting inspections from businesses-specific to property-based will increase effectiveness and sense of responsibility and ownership. Education and outreach must be followed up with inspection and enforcement of regulations to encourage proper landscape and water conservation strategies.	Jurisdictional	FY16	Continuous-Ongoing	X	X	X	X	X	X		Commercial, Industrial, Municipal, and Residential Areas; Irrigation Runoff	T&SW
CSD-22*	Increase enforcement of sweeping and maintenance of private roads and parking lots in targeted areas.	Refer to Minimum BMPs in JRMP (Appendix IX).	Jurisdictional	FY16	Continuous-Ongoing	X	X	X	X				Streets, Roads	T&SW
CSD-23*	Increase identification and enforcement of actionable erosion and slope stabilization issues on private property and require stabilization and repair.	Eroding and unstable slope areas on private property (excluding construction sites) will be identified as potential sediment loading sources and subject to enforcement. In the short term, this will target enhanced inspection and enforcement programs to ensure inspectors address erosion and slope instability for the purpose of education.	Jurisdictional	FY16	Continuous-Ongoing	X	X			X		X	Erosion, Hydromodification	T&SW

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
<b>Non-JRMP Strategies (Optional Strategies, B.3.b.(1)(b))</b>														
<b>Nonstructural Strategies</b>														
CSD-24	Investigation and research of emerging BMP technology.	Annually the Construction & Development Standards Group identifies new tasks to conduct literature review, communication with researchers outside of the City, physical testing and experimentation of new or emerging technologies, and other research with the goal of updating tools available for reducing pollutant loads from development and redevelopment sites. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Optional	Prior to FY16	Continuous- As needed	X	X	X	X	X	X	X	Variable	T&SW with DSD, PWD, BIA, NGOs, Copermittees, and Engineering Community
CSD-25	Approve and implement a green infrastructure policy.	The City will begin developing a policy in FY16 that will increase the green infrastructure requirements for City CIP projects. This policy will be coordinated with ongoing efforts to update City design manuals and LID design standards for public LID BMPs. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Optional	FY16 (Begin)	Continuous- As needed	X	X	X	X	X	X	X	Residential and Commercial Areas, Streets, and Roads	T&SW with DSD and PWD
CSD-26	Create a manual that outlines right-of-way design standards.	Create a manual that includes flood control performance standards, permanent BMP elements design standards, design standards for green streets and other BMPs, and maintenance access. Provides drainage and streets design standards. Opportunity to merge various existing manuals and provide consistency. Funding and resources were secured for FY2015.	Optional	FY15	Completed within schedule	X	X	X	X	X	X	X	Streets and Roads	T&SW with DSD and PWD

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-27	Create a fund that allows habitat acquisition, protection enhancement, and restoration in conjunction with other cooperating entities including community groups, academic institutions, state county, and federal agencies, etc.	This strategy may be implemented at any time at the City's discretion if the following triggers are met: 1) funding to address MS4 discharges is identified and secured, 2) staff resources are identified and secured, 3) partners have been identified and formal MOUs have been developed, and 4) consensus and community support has been achieved. Resources necessary to implement this strategy include a coordinator or manager and maintenance for acquired or restored lands. Projected funding needs may be met through grant funding, support from community groups or other institutions, or the City's General Fund. All General Funds are secured on an annual basis and are contingent upon annual budget approval by City Council. It is anticipated that a minimum of 1 FTE will be needed to implement the program. Once initiated, the time frame for planning to initial implementation is expected to be 3 years. Implementation is in perpetuity as long as funding is retained.	Optional	Must be triggered	Continuous as funding allows	X	X	X	X	X	X	X	Land Development	T&SW with DSD, PWD, BIA, NGOs, Copermittees, and Engineering Community
CSD-28	Residential and Commercial BMP: Rain Barrel	The existing PUD rebate program will continue for residential properties and expand for commercial properties for water collection, conservation, and reuse with rain barrels. Will occur city-wide in residential areas. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Optional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X		Residential Areas	T&SW with DSD, PUD, PWD, & local water agencies

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-29	Residential and Commercial BMP: Grass Replacement	The existing PUD grass replacement cash rebate program will continue and expand for residential and commercial properties. Program encourages a reduction in water use through the conversion of non-artificial grass to water wise plant material, while maintaining a high level of living landscape to benefit the environment. Program does not allow for conversion to artificial turf. Will occur city-wide in residential and commercial areas. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Optional	Prior to FY16	Continuous- Ongoing	X	X	X	X	X	X	Residential and Commercial Areas, Irrigation Runoff, Landscaping	T&SW with DSD, PUD, PWD, & local water agencies	
CSD-30	Residential and Commercial BMP: Downspout Disconnect	Disconnecting downspouts provide alternate runoff pathways from rooftops, sidewalks, driveways, and roads. Disconnecting downspouts from residential areas to pervious land can allow for depression storage and infiltration. Will occur city-wide in residential and commercial areas. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Optional	FY16	Continuous- Ongoing	X	X	X	X	X	X	Residential and Commercial Areas	T&SW with DSD, PUD, PWD, & local water agencies	
CSD-31	Residential and Commercial BMP: Microirrigation	The existing PUD micro-irrigation rebate program will continue and increase for residential and commercial properties. Application of microirrigation aims to improve the efficiency of landscape irrigation through the precise application of water. Will occur city-wide in residential areas. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Optional	Prior to FY16	Continuous- Ongoing	X	X	X	X	X	X	Residential Areas, Irrigation Runoff	T&SW with DSD, PUD, PWD, & local water agencies	

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-32	Provide Onsite Water Conservation Surveys.	Provide free onsite water conservation surveys to commercial and residential customers to reduce overirrigation and to encourage water conservation. Will occur city-wide in residential and commercial areas. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Optional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	Residential and Commercial Areas, Irrigation Runoff, Landscaping	T&SW with DSD, PUD, PWD, & local water agencies	
CSD-33	Enhance and expand trash cleanups through community-based organizations involving target audiences.	Increase effectiveness and reach of trash/beach cleanups and community based efforts by engaging community groups to self-define and carry-out trash clean-ups. Longstanding partnerships and sponsorships with I Love A Clean San Diego and others are recommended to be continued and enhanced. To effectively target stream clean-up efforts, focus on partnerships with community organizations which provide strong engagement with target audiences and communities. Cleanups target trash, however a reduction in trash also reduces other pollutants such as bacteria and nutrients that can attach to food waste wrappers and yard waste. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Optional	FY16	Continuous-Ongoing	X		X	X			Waste Disposal, Parks and Recreation	T&SW; Park and Rec	

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))	
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife			
CSD-34	Trash mitigation in the western portion of the Otay River HU.	Longstanding partnerships and sponsorships with I Love A Clean San Diego and Otay Valley Regional Park (OVRP) will be continued and enhanced. The City of San Diego has a Joint Exercise Powers Agreement with the City of Chula Vista and the County of San Diego to manage the OVRP. City of San Diego park rangers perform regular maintenance of the Western OVRP including, but not limited to: overseeing all contract services; patrolling the Park and keeping it as clean and safe as possible; providing educational opportunities for visitors; providing consistent public outreach; maintaining the grounds and facilities; and coordinating with various agencies, public utilities, and other organizations. The park rangers work with WildCoast to educate the local community, and WildCoast supports OVRP's educational programs, such as brochure development and public outreach events like OVRP Day, I Love A Clean San Diego cleanups, and various other events throughout the year. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Optional	Prior to FY16	Continuous-Ongoing	X		X	X				X	Waste Disposal, Parks and Recreation	Parks and Rec
CSD-35	Conduct a Comprehensive Benefits Analysis to identify benefits other than water quality that are applicable to each of the specific WQIP strategies.	The analysis identifies which other benefits apply to each strategy, and documents the assumptions making those linkages. The delineation of other benefits to strategies includes a general description of each benefit, and a listing of the assumptions that were made to link those benefits to strategies. In addition, the other benefits are characterized with respect to who is directly affected: the city, local residents, local businesses, or visitors. This analysis may be used as part of the adaptive management process to modify future strategies. Funding and resources were secured for FY2015.	Optional	FY15	Completed within schedule	X	X	X	X	X	X	X	Variable	T&SW	

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-36	Address and clean up trash from transient encampments with collaboration from the Homeless Outreach Team.	Coordinate with the Homeless Outreach Team to respond to transient encampment trash complaints. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Optional	FY16	Continuous-Ongoing	X	X		X			X	Transient Encampments	T&SW with Police, ESD, Urban Corps, Alpha Project
CSD-37	Continue participating in source reduction initiatives.	Source reduction initiatives are ultimately the most effective measure to remove pollutants from surface waters, where feasible. Bans or progressive phase-outs that may be considered include: leaf blowers, plastic bags, architectural copper (generally a legacy issue), as well as prohibiting or more aggressively regulating vehicle washing. Additional source reduction initiatives to consider include pesticide sales at hardware stores and irrigation supply stores. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Optional	Prior to FY16	Continuous-Ongoing			X					Variable	T&SW
CSD-37.1	Coordinate with Fleet Services to replace City-owned vehicle brake pads with copper-free brake pads as they become commercially available.	Consider legislative mandate and cooperative implementation of copper-free brake pads on city-owned vehicle to reduce pollutant deposition. Projected funding needs may be met through grant funding, support from community groups or other institutions, or the City's General Fund. All General Funds are secured on an annual basis and are contingent upon annual budget approval by City Council.	Optional	FY18	Continuous-Ongoing			X					Automotive	T&SW, ESD with PWD (Fleet Services)

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-37.2	Develop and implement a Zinc Reduction Program.	Develop and implement zinc reduction program. This strategy may be implemented at any time at the City's discretion if the following triggers are met: 1) funding to address MS4 discharges is identified and secured and 2) staff resources are identified and secured. Resources necessary to implement this strategy include a coordinator or project manager. Projected funding needs may be met through grant funding, support from community groups or other institutions, or the City's General Fund. All General Funds are secured on an annual basis and are contingent upon annual budget approval by City Council. Once initiated, the time frame for planning, implementation, and assessment is expected to be 7 years. If effective, continued implementation will be considered.	Optional	Must be triggered	Continuous if effective and as funding allows			X					Commercial and Industrial Areas, Metal	TBD
CSD-37.3	Develop and implement targeted roof replacement incentive program for Chollas Creek Watershed.	If determined feasible and effective upon completion of development of Zinc Reduction Program, rebates or other incentive programs to replace metal roofs will be considered. This strategy may be implemented at any time at the City's discretion if the following triggers are met: 1) funding to address MS4 discharges is identified and secured and 2) staff resources are identified and secured. Resources necessary to implement this strategy include City staff or consulting team. Projected funding needs may be met through grant funding, support from community groups or other institutions, or the City's General Fund. All General Funds are secured on an annual basis and are contingent upon annual budget approval by City Council. Once initiated, implementation and assessment is expected in 7 years. If effective, continued implementation will be considered.	Optional	Must be triggered	Continuous if effective and as funding allows			X					Commercial, Industrial, and Residential Areas, Metal	TBD

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-38	Proactively monitor for erosion, and complete minor repair and slope stabilization on municipal property.	Actively identify and repair eroding slopes that may be contributing to sediment loading. Prepare an inventory and assessment of eroding areas and their risk to surface waters. Follow assessment with a schedule for ongoing inspection and stabilization (potentially based on a number or percentage of sites annually). Consider Caltrans program as a template. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Optional	FY16	Continuous-Ongoing	X	X			X			Municipal, Hydromodification	T&SW
CSD-39	Conduct special studies.	Special studies will be conducted to gather data to identify pollutant sources, appropriate targets, or other information. Includes collaboration with universities. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Optional	FY16	Continuous-Ongoing	X	X	X	X	X	X		Variable	T&SW
CSD-39.1	Participate in Reference Watershed Study.	The San Diego Regional Reference Stream Study (currently being conducted by the Southern California Coastal Water Research Project). The study will develop numeric targets that account for “natural sources” to establish the concentrations or loads from streams in a minimally disturbed or “reference” condition. Refer to Section 5.1 for further details. Will occur region-wide. Funding and resources were previously secured.	Optional	Prior to FY16	Completed within schedule	X	X						N/A	T&SW, SCCWRP, Regional Copermittees
CSD-39.2	Conduct a Cost of Service Study.	Conduct a Cost of Service Study that will examine the full cost of flood control and storm water strategies needed to comply with storm water regulations for the City of San Diego. The City of San Diego’s Watershed Asset Management Plan will be used as the basis for the study. Funding and resources have been secured for FY2016.	Optional	FY16	Completed within schedule								Variable	TBD

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-40	Conduct Sustainable Return on Investment (SROI) analysis to estimate strategies' co-benefits and impacts to the public and the private sector on a common scale.	SROI is an economics-based framework for evaluating quantitative and qualitative performance metrics and monetizing them, if possible, along a triple bottom line (i.e. financial, societal, and environmental). This strategy may be implemented at any time at the City's discretion if the following triggers are met: 1) funding to address MS4 discharges is identified and secured, 2) staff resources are identified and secured, 3) partners have been identified and formal MOUs have been developed, and 4) consensus and community support has been achieved. Resources necessary to implement this strategy include City staff or consulting team. Projected funding needs may be met through grant funding, support from community groups or other institutions, or the City's General Fund. All General Funds are secured on an annual basis and are contingent upon annual budget approval by City Council. The anticipated one-time cost to implement is \$115,000. Once initiated, the analysis is expected to be complete in 1 year.	Optional	Must be triggered	Completed within schedule							Variable	T&SW and public participation	

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-41	Collaborate with the County, if a County-led regional social services effort is established, to provide sanitation and trash management for individuals experiencing homelessness and determine if the program is suitable and appropriate for jurisdictional needs to meet goals.	Support a non-profit or consortium to provide sanitation services associated with hygiene as well as trash management for persons experiencing homelessness. Rented or purchased shower/sanitary trailers providing mobile showers may be organized at specifically scheduled locations and times. This provision has been proposed as a method for preventing surface water usage for sanitation and bathing, as well as opportunity for outreach and referral by social service agencies. The trash management services will include providing trash bags, trash collection areas, and shower/sanitary facilities at centers which provide daytime shelter to their clients, or on a mobile-basis for known transit camps. This strategy may be implemented at any time at the City's discretion if the following triggers are met: 1) funding to address MS4 discharges is identified and secured, 2) staff resources are identified and secured, 3) partners have been identified and formal MOUs have been developed, and 4) consensus and community support has been achieved. Resources necessary to implement this strategy include City staff to coordinate with the regional effort. Projected funding needs may be met through grant funding, support from community groups or other institutions, or the City's General Fund. All General Funds are secured on an annual basis and are contingent upon annual budget approval by City Council. The anticipated cost to implement the strategy includes an initial first year planning cost of \$30,000 and implementation is expected to cost \$10,000 annually thereafter. Once initiated, development of the program is expected in 1 year. Implementation is in perpetuity as long as funding is available.	Optional	Must be triggered	Continuous as funding allows	X	X		X			X	Transient Encampments	T&SW

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-42	Participate in an assessment to determine if implementation of an urban tree canopy (UTC) program would benefit water quality and other City goals, where feasible.	Perform a feasibility study to determine if implementing an UTC program would be beneficial to the City's goals. UTC intercepts rainfall through increased coverage of leaves, branches, and stems and reduces runoff from the storm drainage system. Benefits associated with enhancing an UTC include reducing heat island effects and air pollution in addition to aesthetics and community benefits. Where feasible, native trees will be utilized to prevent invasive trees from migrating to open spaces and to conserve water. This strategy may be implemented at any time at the City's discretion if the following triggers are met: 1) funding to address MS4 discharges is identified and secured and 2) staff resources are identified and secured. Resources necessary to implement this strategy include City staff or consulting team. Projected funding needs may be met through grant funding, support from community groups or other institutions, or the City's General Fund. All General Funds are secured on an annual basis and are contingent upon annual budget approval by City Council. Once initiated, implementation and assessment is expected in 2 years.	Optional	Must be triggered	Completed within schedule	X	X	X	X	X	X	Variable	Planning Dept. with T&SW, SANDAG, and Nature Conservancy	

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-43	Conduct a feasibility study to test Permeable Friction Course (PFC), a porous asphalt that overlays impermeable asphalt.	Perform an assessment to determine the feasibility of implementing PFC on City streets. PFC, an overlay of porous asphalt, is an innovative roadway material that improves driving conditions in wet weather and water quality. Placed in a layer 25-50mm thick on top of regular impermeable pavement, PFC allows rainfall to drain within the porous layer rather than on top of the pavement. PFC has also been shown to reduce concentrations of pollutants commonly observed in highway runoff. PFC incorporates stormwater treatment into the roadway surface and does not require additional right-of-way. This strategy may be implemented at any time at the City's discretion if the following triggers are met: 1) funding to address MS4 discharges is identified and secured and 2) staff resources are identified and secured. Resources necessary to implement this strategy include City staff or consulting team. Projected funding needs may be met through grant funding, support from community groups or other institutions, or the City's General Fund. All General Funds are secured on an annual basis and are contingent upon annual budget approval by City Council. The anticipated cost to implement the strategy is \$50,000. Once initiated, implementation and assessment is expected in 2 years.	Optional	Must be triggered	Completed within schedule	X	X	X	X	X	X	Streets, Roads, and Parking	T&SW with DSD, PWD, BIA, NGOs, Copermittees, and Engineering Community	

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-44	As opportunities arise and funding sources are identified, protect areas that are functioning naturally by avoiding impervious development and degradation on unpaved open space areas, creating permanent open space protections on undeveloped city-owned land, and accepting privately-owned undeveloped open areas.	This strategy may be implemented if there is interest in participation by the public or private entity with current control of the land. This strategy may be implemented at any time at the City's discretion if the following triggers are met: 1) identification of partners, if needed (public, private, non-profit), 2) identification of costs and potential sources of funding, 3) final agreement by public or private entity with current control of the land, 4) final agreement by all other participating partners including acceptance by intended land- or asset-owning City department, and 5) funding in place. Resources necessary to implement this strategy include a coordinator or manager and maintenance for acquired lands. Projected funding needs may be met through grant funding, support from community groups or other institutions, or the City's General Fund. All General Funds are secured on an annual basis and are contingent upon annual budget approval by City Council. The time frame for implementation will vary by project. Implementation is in perpetuity as long as funding is available.	Optional	Must be triggered	Continuous as funding allows	X	X	X	X	X	X	X	Open Space Areas, Residential Areas	TBD
CSD-45	Participate in a watershed council or group if one is established.	This strategy may be implemented at any time at the City's discretion if the following triggers are met: 1) partners have been identified and formal MOUs have been developed and 2) consensus and community support has been achieved. Resources necessary to implement this strategy include a coordinator or project manager. Projected funding needs may be met through award of a grant, support from community groups or other institutions, or the City's General Fund. All General Funds are secured on an annual basis and are contingent upon annual budget approval by City Council. Once initiated, development of the program is expected in 2 years. Implementation would be in perpetuity as long as funding is retained.	Optional	Must be triggered	Continuous as funding allows	X	X	X	X	X	X	X	Variable	TBD

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-46	Prohibit introduction of invasive plants in new development and redevelopment projects.	Coordinate with the City's Development Services Department to continue to prohibit introduction of invasive species such as <i>Arundo donax</i> and <i>Cortaderia selloana</i> for new development or redevelopment projects as specified in the City's municipal code for landscape. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Optional	Prior to FY16	Continuous-Ongoing	X				X	X	X	Land Development, Landscaping	T&SW with DSD
<b>Structural Strategies</b>														
CSD-47	Sunset Cliffs Erosion Control Project: Phase 1 will include restoration of natural areas to allow water percolation, and installation of site appropriate drainage devices to initiate protection of Sunset Cliffs Natural Park from soil erosion	The City of San Diego is planning to implement a phased project that will preserve and protect the coastal bluffs at Sunset Cliffs Natural Park from soil erosion. A feasibility study was completed in 2012 which identified general restoration areas and drainage facilities. The following resources, funds, and steps are needed to implement the erosion control project: 1) Identify specific project locations and drainage improvements 2) Secure funds in the form of general funds, bonds, or grants 3) Obtain City Council approval of Capital Improvement Projects budget 4) Initiate preliminary engineering to narrow project scope 5) Hire design consultant to develop detailed construction plans and construction cost estimates 6) Obtain necessary environmental permits such as City Site Development and Coastal Development Permit 6) Complete construction contractor bid and award process for construction phase 7) Construct project 8) Operation and maintenance will be in perpetuity. Funds and staff resources for this function must be approved by City Council as part of the City's annual budget	Optional	FY22	Continuous-Ongoing	X	X	X	X	X	X	X	Paved surface Runoff,	T&SW with PWD, Park and Recreation

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
<b>Green Infrastructure</b>														
CSD-48	North 252 Corridor Park Phase I (Dorothy Petway Park) - Project ID 1002	2 vegetated filter strips and one vegetated swale was implemented at I-5 and Rigel Street. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Optional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	Publicly Owned Park	T&SW with PWD	
CSD-49	43rd and Logan Roadway Improvement - Project ID 1387 (bioretention to treat a drainage area of 0.73 acre)	The City has implemented a bioretention BMP on the northeast corner of the intersection of 43rd and Logan Avenue to treat storm water runoff from the northerly half of Logan Avenue from Dominion Street to 43rd Street (drainage area of about 0.73 acre). In addition, there are three sets of curbside filters installed along the southeast corner of 43rd Street and Logan Avenue. Storm water from Logan Avenue flows through a curb opening into a pretreatment device to filter out gross solids and some sediment, and then flows into 12 filtration units connected in series. The curbside filtration units treat 5.76 acres (See Proprietary BMP Strategies). The City has received grant funding to conduct BMP effectiveness monitoring for hydrologic performance and pollutant removal over a two-year period.	Optional	FY14	Continuous-Ongoing	X	X	X	X	X	X	Roads, Streets	T&SW with PWD	
CSD-50	Green lot in Southcrest Park.	Green lot on Newton Ave. west of 43rd to treat a drainage area of 36 acres. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Optional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	Publicly Owned Parks	T&SW with PWD	
CSD-51	Central Region Public Health Center replacement of impervious pavement with rubberized porous asphalt.	Central Region Public Health Center replaced 6,250 square feet of impervious pavement with rubberized porous asphalt. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Optional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	Commercial Area, Roads, Streets	T&SW with PWD	

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-52	Southeast Family Resource Center bio-filtration planters	Southeast Family Resource Center constructed four bio-filtration planters in the parking lot and adjacent to the building to filter runoff from the roof and parking surface. They also installed porous pavers at the entrance and exit of the parking lot. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Optional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	Commercial Area, Roads, Streets	T&SW with PWD	
CSD-53	10.31 acres of bioretention have been identified as potential opportunities for green infrastructure implementation on public parcels to treat an impervious drainage area of 298.12 acres with a total storage volume with 13.56 acre-feet.	Staggered construction, operation, and maintenance of 10.31 acres of bioretention to treat an impervious drainage area of 298.12 acres with a total storage volume of 13.56 acre-feet. The following resources, funds, and steps are needed to implement this strategy: 1) Identify project locations (3-6 months) 2) Secure funds in the form of general funds, bonds, or grants (6 months-2 yrs) 3) Obtain City Council approval of Capital Improvement Projects budget (occurs annually in May) 4) Initiate preliminary engineering to narrow project scope (6 months; approx \$30K per CIP project) 5) Hire design consultant to develop detailed construction plans and construction cost estimates (2 yrs; approx \$500K per CIP project) 6) Complete construction contractor bid and award process for construction phase (6 months) 7) Construct project (4 months- 1 yr; project construction costs are TBD and are based on size of the project). 8) Operation and maintenance will be in perpetuity. Funds and staff resources for this function must be approved by City Council as part of the City's annual budget.	Optional	FY18	Continuous-Ongoing	X	X	X	X	X	X	Residential Areas, Municipal Areas, Publicly Owned Parks, Open Space Areas	T&SW with PWD	

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
<b>Green Streets</b>														
CSD-54	Beta Street	Operation and maintenance of a 0.063 acre (footprint) green street project at Beta Street and 37th to treat a drainage area of 2.1 acres. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Optional	FY17	Continuous-Ongoing	X	X	X	X	X	X	Roads, Streets, Commercial Areas, Residential Areas	T&SW with PWD	
CSD-55	25.52 acres of green streets (12.76 acres of bioretention and 12.76 acres of permeable pavement) have been identified as potential opportunities for green street projects to treat a total drainage area of 7,260.34 acres with a total storage volume of 39.66 acre-feet.	Staggered construction, operation and maintenance of 25.52 acres of green streets (12.76 acres of bioretention and 12.76 acres of permeable pavement) to treat a total drainage area of 7,260.34 acres with a total storage volume of 39.66 acre-feet. The following resources, funds, and steps are needed to implement this strategy: 1) Identify project locations (3-6 months) 2) Secure funds in the form of general funds, bonds, or grants (6 months-2 yrs) 3) Obtain City Council approval of Capital Improvement Projects budget (occurs annually in May) 4) Initiate preliminary engineering to narrow project scope (6 months; approx \$30K per CIP project) 5) Hire design consultant to develop detailed construction plans and construction cost estimates (2 yrs; approx \$500K per CIP project) 6) Complete construction contractor bid and award process for construction phase (6 months) 7) Construct project (4 months- 1 yr; project construction costs are TBD and are based on size of the project). 8) Operation and maintenance will be in perpetuity. Funds and staff resources for this function must be approved by City Council as part of the City's annual budget.	Optional	FY18	Continuous-Ongoing	X	X	X	X	X	X	Roads, Streets, Commercial Areas, Residential Areas	T&SW	

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
<b>Multiuse Treatment Areas</b>														
<b>Infiltration and Detention Basins</b>														
CSD-56	A dry extended detention basin can be implemented at the Park De La Cruz and Cherokee Point Elementary School site upon detailed site assessment.	Construction, operation and maintenance of a 1.5 acre (footprint) dry extended detention basin to treat a total drainage area of 81 acres (on 5.5 acres of available space, APN 3094130100). Location intersection is Wightman Street and 38th Street. The following resources, funds, and steps are needed to implement this strategy: 1) Identify project locations (3-6 months) 2) Secure funds in the form of general funds, bonds, or grants (6 months-2 yrs) 3) Obtain City Council approval of Capital Improvement Projects budget (occurs annually in May) 4) Initiate preliminary engineering to narrow project scope (6 months; approx \$30K per CIP project) 5) Hire design consultant to develop detailed construction plans and construction cost estimates (2 yrs; approx \$500K per CIP project) 6) Complete construction contractor bid and award process for construction phase (6 months) 7) Construct project (4 months- 1 yr; project construction costs are TBD and are based on size of the project). 8) Operation and maintenance will be in perpetuity. Funds and staff resources for this function must be approved by City Council as part of the City's annual budget.	Optional	FY18	Continuous-Ongoing	X	X	X	X	X	X	Publicly Owned Park, Residential Area	T&SW with PWD	

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-57	A subsurface detention basin at Joyner Elementary School can be implemented upon detailed site assessment.	Construction, operation and maintenance of a 1.1 acre (footprint) subsurface detention gallery to treat a total drainage area of 87 acres (on 3.3 acres of available space, APN 4760923000). Location intersection is Myrtle Avenue and 43rd street. Subsurface detention basins would be designed and constructed per all applicable City safety codes and standards. The following resources, funds, and steps are needed to implement this strategy: 1) Identify project locations (3-6 months) 2) Secure funds in the form of general funds, bonds, or grants (6 months-2 yrs) 3) Obtain City Council approval of Capital Improvement Projects budget (occurs annually in May) 4) Initiate preliminary engineering to narrow project scope (6 months; approx \$30K per CIP project) 5) Hire design consultant to develop detailed construction plans and construction cost estimates (2 yrs; approx \$500K per CIP project) 6) Complete construction contractor bid and award process for construction phase (6 months) 7) Construct project (4 months- 1 yr; project construction costs are TBD and are based on size of the project). 8) Operation and maintenance will be in perpetuity. Funds and staff resources for this function must be approved by City Council as part of the City's annual budget.	Optional	FY18	Continuous-Ongoing	X	X	X	X	X	X	Residential Areas	T&SW with PWD	

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-58	A subsurface detention basin at Euclid Elementary School can be implemented upon detailed site assessment.	Construction, operation and maintenance of a 0.9 acre (footprint) subsurface detention gallery to treat a total drainage area of 77 acres (on 1.6 acres of available space, APN 4714023000). Location intersection is Orange Avenue and Euclid Avenue. Subsurface detention basins would be designed and constructed per all applicable City safety codes and standards. The following resources, funds, and steps are needed to implement this strategy: 1) Identify project locations (3-6 months) 2) Secure funds in the form of general funds, bonds, or grants (6 months-2 yrs) 3) Obtain City Council approval of Capital Improvement Projects budget (occurs annually in May) 4) Initiate preliminary engineering to narrow project scope (6 months; approx \$30K per CIP project) 5) Hire design consultant to develop detailed construction plans and construction cost estimates (2 yrs; approx \$500K per CIP project) 6) Complete construction contractor bid and award process for construction phase (6 months) 7) Construct project (4 months- 1 yr; project construction costs are TBD and are based on size of the project). 8) Operation and maintenance will be in perpetuity. Funds and staff resources for this function must be approved by City Council as part of the City's annual budget.	Optional	FY18	Continuous-Ongoing	X	X	X	X	X	X	Residential Areas	T&SW with PWD	

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-59	A subsurface detention basin at Ibarra Elementary School can be implemented upon detailed site assessment.	Construction, operation and maintenance of a 1.4 acre (footprint) subsurface detention gallery to treat a total drainage area of 108 acres (on 4.0 acres of available space, APN 4714222800). Location intersection is Orange Avenue and Winona Avenue. Subsurface detention basins would be designed and constructed per all applicable City safety codes and standards. The following resources, funds, and steps are needed to implement this strategy: 1) Identify project locations (3-6 months) 2) Secure funds in the form of general funds, bonds, or grants (6 months-2 yrs) 3) Obtain City Council approval of Capital Improvement Projects budget (occurs annually in May) 4) Initiate preliminary engineering to narrow project scope (6 months; approx \$30K per CIP project) 5) Hire design consultant to develop detailed construction plans and construction cost estimates (2 yrs; approx \$500K per CIP project) 6) Complete construction contractor bid and award process for construction phase (6 months) 7) Construct project (4 months- 1 yr; project construction costs are TBD and are based on size of the project). 8) Operation and maintenance will be in perpetuity. Funds and staff resources for this function must be approved by City Council as part of the City's annual budget.	Optional	FY18	Continuous-Ongoing	X	X	X	X	X	X	Residential Areas	T&SW with PWD	

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-60	A subsurface detention basin at Alba Middle/High School can be implemented upon detailed site assessment.	Construction, operation and maintenance of a 0.8 acre (footprint) subsurface detention gallery to treat a total drainage area of 62 acres (on 7.0 acres of available space, APN 4721302700). Location intersection is Trojan Avenue and 56th Street. Subsurface detention basins would be designed and constructed per all applicable City safety codes and standards. The following resources, funds, and steps are needed to implement this strategy: 1) Identify project locations (3-6 months) 2) Secure funds in the form of general funds, bonds, or grants (6 months-2 yrs) 3) Obtain City Council approval of Capital Improvement Projects budget (occurs annually in May) 4) Initiate preliminary engineering to narrow project scope (6 months; approx \$30K per CIP project) 5) Hire design consultant to develop detailed construction plans and construction cost estimates (2 yrs; approx \$500K per CIP project) 6) Complete construction contractor bid and award process for construction phase (6 months) 7) Construct project (4 months- 1 yr; project construction costs are TBD and are based on size of the project). 8) Operation and maintenance will be in perpetuity. Funds and staff resources for this function must be approved by City Council as part of the City's annual budget.	Optional	FY18	Continuous-Ongoing	X	X	X	X	X	X	Residential Areas	T&SW with PWD	

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-61	A subsurface detention basin at Clay Park can be implemented upon detailed site assessment.	Construction, operation and maintenance of a 0.5 acre (footprint) subsurface detention gallery to treat a total drainage area of 26 acres (on 6.0 acres of available space, APN 4674900400). Location intersection is Solita Avenue and Seminole Drive. Subsurface detention basins would be designed and constructed per all applicable City safety codes and standards. The following resources, funds, and steps are needed to implement this strategy: 1) Identify project locations (3-6 months) 2) Secure funds in the form of general funds, bonds, or grants (6 months-2 yrs) 3) Obtain City Council approval of Capital Improvement Projects budget (occurs annually in May) 4) Initiate preliminary engineering to narrow project scope (6 months; approx \$30K per CIP project) 5) Hire design consultant to develop detailed construction plans and construction cost estimates (2 yrs; approx \$500K per CIP project) 6) Complete construction contractor bid and award process for construction phase (6 months) 7) Construct project (4 months- 1 yr; project construction costs are TBD and are based on size of the project). 8) Operation and maintenance will be in perpetuity. Funds and staff resources for this function must be approved by City Council as part of the City's annual budget.	Optional	FY18	Continuous-Ongoing	X	X	X	X	X	X	Publicly Owned Park, Residential Area	T&SW with PWD	

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-62	Memorial Park: An infiltration basin has been constructed from the parking on the west side of Memorial Park to treat a drainage area of 1.4 acres.	A 0.10 acre infiltration basin has been constructed to treat runoff from the parking on the west side of Memorial Park that has been diverted from the existing storm drain system (drainage area of 1.4 acres). Before entering the basin, the runoff passes through a hydrodynamic separator that removes pollutants that settle out or float. Runoff then enters the basin where it infiltrates into the underlying soils. Runoff in excess of the 5-year storm bypasses the BMP via an overflow pipe and returns to the regular storm drain system. Funding and resources were secured for FY2014. Funding for future fiscal years is contingent on annual budget approval by City Council.	Optional	FY14	Continuous-Ongoing	X	X	X	X	X	X	Publicly Owned Park	T&SW with PWD	
CSD-63	Memorial Skateboard Park- Addition of detention vault to treat a drainage area of 0.69 acre.	A subsurface detention vault is proposed to be installed in line with the existing 12-inch PVC pipe to capture the runoff generated by the 85th percentile storm. Detained runoff is proposed to be reused to irrigate the athletic fields at Memorial Park. Runoff volume in excess of the detention vault capacity is proposed to overflow into an adjacent subsurface infiltration gallery for additional volume reduction and treatment. This project was initially constructed prior to the 2007 Municipal Storm Water Permit, so implementation of the BMP retrofit recommendations exceeds applicable treatment requirements by treating runoff from 0.69 acre of impervious surface to the 85th percentile storm. Funding and resources were secured for FY2015. Funding for future fiscal years is contingent on annual budget approval by City Council.	Optional	FY15	Continuous-Ongoing	X	X	X	X	X	X	Publicly Owned Park	T&SW with PWD	

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-64	If interim load reduction goals are not met and additional multiuse treatment areas are required, an infiltration basin(s) may be considered on publicly owned open spaces in canyon areas on a case-by-case basis when no other opportunities for load reductions exist.	Construction, operation, and maintenance of infiltration basin(s) in canyon areas. Nine potential canyon sites, owned by City of San Diego, have been identified in Chollas watershed that provide up to 30 acres of available space (83 total parcel acreage). This strategy may be triggered as 1) interim goals are not met, 2) funding to address MS4 discharges is identified and secured, 3) staff resources are identified and secured, 4) partners have been identified and formal MOUs have been developed, and 5) permits required by regulatory agencies are secured. The following resources, funds, and steps are needed to implement this strategy if the above triggers are met or at the City's discretion: 1) Identify project locations (3-6 months) 2) Secure funds in the form of general funds, bonds, or grants (6 months-2 yrs) 3) Obtain City Council approval of Capital Improvement Projects budget (occurs annually in May) 4) Initiate preliminary engineering to narrow project scope (6 months; approx \$30K per CIP project) 5) Hire design consultant to develop detailed construction plans and construction cost estimates (2 yrs; approx \$500K per CIP project) 6) Complete construction contractor bid and award process for construction phase (6 months) 7) Construct project (4 months- 1 yr; project construction costs are TBD and are based on size of the project). 8) Operation and maintenance will be in perpetuity. Funds and staff resources for this function must be approved by City Council as part of the City's annual budget.	Optional	Must be triggered	Continuous-Ongoing	X	X	X	X	X	X	Open Space Area	T&SW with PWD	

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
<b>Stream, Channel and Habitat Rehabilitation Projects (B.3.b.(1)(b)(iii))</b>														
CSD-65	If interim load reduction goals are not met and additional stream, channel, and habitat rehabilitation projects are required, implement as needed.	This strategy may be triggered as 1) funding to address MS4 discharges is identified and secured, 2) staff resources are identified and secured, 3) partners have been identified and formal MOUs have been developed, 4) permits required by regulatory agencies are secured, and 5) recommendations from the community are identified and consensus and community support has been achieved. Will occur in areas identified during feasibility studies. The following resources, funds, and steps are needed to implement this strategy if the above triggers are met or at the City's discretion: 1) Identify project locations (3-6 months) 2) Secure funds in the form of general funds, bonds, or grants (6 months-2 yrs) 3) Obtain City Council approval of Capital Improvement Projects budget (occurs annually in May) 4) Initiate preliminary engineering to narrow project scope (6 months; approx \$30K per CIP project) 5) Hire design consultant to develop detailed construction plans and construction cost estimates (2 yrs; approx \$500K per CIP project) 6) Complete construction contractor bid and award process for construction phase (6 months) 7) Construct project (4 months- 1 yr; project construction costs are TBD and are based on size of the project). 8) Operation and maintenance will be in perpetuity. Funds and staff resources for this function must be approved by City Council as part of the City's annual budget.	Optional	Must be triggered	Continuous-Ongoing	X	X	X	X	X	X	X	Residential Areas, Municipal Areas, Publicly Owned Parks, Open Space Areas	T&SW

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
<b>Water Quality Improvement BMPs</b>														
<b>Proprietary BMPs</b>														
CSD-66	43rd and Logan Roadway Improvement - Project ID 1387 (filtration units treat 5.76 acres)	Three curbside filtration units were installed along S 43rd street and Logan Avenue. The curbside filtration units treat a total of 5.76 acres. Funding and resources were secured for FY2014. Funding for future fiscal years is contingent on annual budget approval by City Council. A bioretention BMP is also implemented on this site (See GI strategies).	Optional	FY14	Continuous-Ongoing	X	X	X	X	X	X	Street, Roads, Commercial Area, Residential Area	T&SW with PWD	
CSD-67	N Chollas Community Park Phase 1B - Project ID 855	4 drainage inserts were installed in Chollas Lake Park near College Grove Drive and Caminito Chollas. Funding and resources were secured for FY2014. Funding for future fiscal years is contingent on annual budget approval by City Council.	Optional	Prior to FY14	Continuous-Ongoing	X	X	X	X	X	X	Publicly Owned Park	T&SW with PWD	
CSD-68	Lisbon Street Roadway and Utility Improvements - Project ID 858	2 drainage inserts were installed at Imperial Avenue and Lisbon Street. Funding and resources were secured for FY2014. Funding for future fiscal years is contingent on annual budget approval by City Council.	Optional	Prior to FY14	Continuous-Ongoing	X	X	X	X	X	X	Street, Roads, Commercial Area, Residential Area	T&SW with PWD	
CSD-69	Fire Station #12 - Project ID 989	1 downspout filter and 10 drainage inserts were installed at Willie James Jones Avenue and Imperial Avenue. Funding and resources were secured for FY2014. Funding for future fiscal years is contingent on annual budget approval by City Council.	Optional	Prior to FY14	Continuous-Ongoing	X	X	X	X	X	X	Municipal Area	T&SW with PWD	
CSD-70	Rigel St Bridge Replacement - Project ID 1008	5 drainage inserts were installed at Rigel Street and Main Street. Funding and resources were secured for FY2014. Funding for future fiscal years is contingent on annual budget approval by City Council.	Optional	Prior to FY14	Continuous-Ongoing	X	X	X	X	X	X	Streets, Roads, Industrial Area	T&SW with PWD	

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
<b>Dry Weather Flow Separation and Treatment Projects</b>														
CSD-71	If interim load reduction goals are not met and additional dry weather flow separation and treatment projects are required, implement as needed.	Construction of dry weather flow separation and treatment projects, where identified. This strategy may be triggered as 1) interim goals are not met, 2) funding to address MS4 discharges is identified and secured, 3) staff resources are identified and secured, and 4) permits required by regulatory agencies are secured. Will occur in downstream reaches where persistent dry weather flows have been observed. The following resources, funds, and steps are needed to implement this strategy if the above triggers are met or at the City's discretion: 1) Identify project locations (3-6 months) 2) Secure funds in the form of general funds, bonds, or grants (6 months-2 yrs) 3) Obtain City Council approval of Capital Improvement Projects budget (occurs annually in May) 4) Initiate preliminary engineering to narrow project scope (6 months; approx \$30K per CIP project) 5) Hire design consultant to develop detailed construction plans and construction cost estimates (2 yrs; approx \$500K per CIP project) 6) Complete construction contractor bid and award process for construction phase (6 months) 7) Construct project (4 months- 1 yr; project construction costs are TBD and are based on size of the project). 8) Operation and maintenance will be in perpetuity. Funds and staff resources for this function must be approved by City Council as part of the City's annual budget.	Optional	Must be triggered	Continuous-Ongoing	X	X	X	X	X	X	Variable	T&SW with PWD	

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
<b>Trash Segregation</b>														
CSD-72	If interim load reduction goals are not met and additional trash segregation projects are required, implement as needed.	Construction of trash segregation (Trash Guards, etc.) projects, where identified. This strategy may be triggered as 1) interim goals are not met, 2) funding to address MS4 discharges is identified and secured, 3) staff resources are identified and secured, and 4) permits required by regulatory agencies are secured. Will occur in high loading areas city-wide. The following resources, funds, and steps are needed to implement this strategy if the above triggers are met or at the City's discretion: 1) Identify project locations (3-6 months) 2) Secure funds in the form of general funds, bonds, or grants (6 months-2 yrs) 3) Obtain City Council approval of Capital Improvement Projects budget (occurs annually in May) 4) Initiate preliminary engineering to narrow project scope (6 months; approx \$30K per CIP project) 5) Hire design consultant to develop detailed construction plans and construction cost estimates (2 yrs; approx \$500K per CIP project) 6) Complete construction contractor bid and award process for construction phase (6 months) 7) Construct project (4 months- 1 yr; project construction costs are TBD and are based on size of the project). 8) Operation and maintenance will be in perpetuity. Funds and staff resources for this function must be approved by City Council as part of the City's annual budget.	Optional	Must be triggered	Continuous-Ongoing	X		X	X			X	Waste Disposal	T&SW with PWD

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
<b>WMA Strategies (Optional Strategies, B.3.b.(2))</b>														
WMA-1	Collaboration with the Regional Board.	The Responsible Agencies will work with the Regional Board to identify solutions and address sources of potential water quality impairments. Priorities include 1) enforcement of the Industrial General Permit and 2) enforcement of other non-MS4 dischargers. Discussions with the Regional Board were initiated in FY15. Collaboration will continue in FY16 to identify an appropriate path forward, including a more detailed time line. Funding and resources have been secured for FY16. Funding for future fiscal years is contingent on annual budget approval by each Responsible Agency.	Optional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Variable	T&SW, WMA Copermittees
WMA-2	Offsite Alternative Compliance Option (WMAA)	The WMAA provides alternative compliance methods in lieu of meeting structural BMP design standards and/or hydromodification management criteria on the project site. The San Diego County Copermittees have collectively funded and provided guidance for development of a regional WMAA. Copermittees compiled a list of candidate projects that consider the numeric goals of the WMAs as well as projects previously identified in JRMPs and other regulatory documents. Next steps include submittal of the water quality equivalency standards final document, anticipated in September 2015. Following a public review and Executive Officer approval, anticipated by November 2015, jurisdictions can formally implement an optional Alternative Compliance Program by December 2015 (time coincident with implementation of standards set forth in the regional BMP Design Manual and local Storm Water Standards Manuals).	Optional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Variable	T&SW, Regional Copermittees

**Table I.4.2 City of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed						Source  (B.3.b.(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies  (B.3.b.(1)(c))	
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow			Habitat/Wildlife
WMA-3	Collaborate with Metals TMDL RPs and the Regional Board to Adopt Site Specific Objectives	Studies to develop site-specific water quality objectives (SSOs) for Chollas Creek in accordance with the Metals TMDL are currently underway. The TMDL RPs will continue to work collaboratively with the Regional Board and watershed stakeholders to determine site-specific water-effect ratios (WERs) for copper and zinc. The collaborative effort will continue through adoption of the site-specific WERs for Chollas Creek. Funding and resources have been secured for FY16. Funding for future fiscal years is contingent on annual budget approval by each Responsible Agency.	Optional	Prior to FY16	Continuous-Ongoing			X					N/A	TMDL RPs, Regional Board

Note:  
 DSD= Development Services Department; PUD = Public Utilities Department; PWD = Public Works Department; T&SW = Transportation and Storm Water Division; TBD = will be determined during the next fiscal year

**Table I.4.3 City of San Diego Annual Schedule**

Construction
Ongoing Implementation/ O&M
As needed/Design

ID	Strategy	Location	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	FY 15 and Earlier	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31
<b>JRMP (E.2-E.7) Strategies (E.3.b.(1)(a))</b>																					
<b>E.3 Development Planning</b>																					
<b>All Development Projects</b>																					
CSD-1	Establish guidelines and standards for all development projects; provide technical support related to implementation of source control BMPs to minimize pollutant generation at each project and implement LID BMPs to maintain or restore hydrology of the area or implement easements to protect water quality, where applicable and feasible. Includes internal coordination and collaboration between City departments (DSD, PWD, and Engineering) to improve success and long-term benefits of BMPs.	City-wide	Prior to FY16	Continuous-Ongoing																	
CSD-1.1	Develop Design Standards for Public LID BMPs.	City-wide	FY14-FY15	Continuous- As needed																	
CSD-1.2	Outreach to impacted industry regarding minimum BMP requirement updates.	City-wide	FY15	Continuous- As needed																	
CSD-2	Train staff on LID regulatory changes and LID practices.	City-wide	FY16	Continuous- As needed																	
CSD-3	Amend municipal code and ordinances, including zoning ordinances, to facilitate and encourage LID opportunities to support compliance with the MS4 Permit and TMDLs in a reasonable manner. Ensure consistency with the City of San Diego's BMP Design Manual. Update the Storm Water Standards Manual accordingly.	City-wide	FY15	Continuous- As needed																	
CSD-4	Provide technical education and outreach to the development community on the design and implementation requirements of the MS4 Permit and Water Quality Improvement Plan requirements.	City-wide	Prior to FY16	Continuous-Ongoing																	
<b>Priority Development Projects (PDPs)</b>																					
CSD-5	For PDPs, administer a program and provide technical support to other City departments to ensure implementation of on-site structural BMPs to control pollutants and manage hydromodification by developing City wide storm water development standards and design guidelines.	City-wide	FY16	Continuous-Ongoing																	

**Table I.4.3 City of San Diego Annual Schedule (continued)**

ID	Strategy	Location	Implementation or Construction Year <small>(B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))</small>	Implementation Schedule <small>(B.3.b.(3)(a)(iv))</small>	FY 15 and Earlier	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31
CSD-5.1	Institute a program to verify and enforce maintenance and performance of treatment control BMPs.	City-wide	FY16	Continuous-Ongoing																	
CSD-6	Update BMP Design Manual procedures to determine nature and extent of storm water requirements applicable to development projects and to identify conditions of concern for selecting, designing, and maintaining appropriate structural BMPs.	City-wide	FY15	Continuous every 5 years/ permit cycle																	
CSD-6.1	Amend BMP Design Manual for trash areas. Require full four-sided enclosure, siting away from storm drains and cover. Consider the retrofit requirement.	City-wide	FY15	Completed within schedule																	
CSD-6.2	Amend BMP Design Manual for animal-related facilities, such as such as animal shelters, "doggie day care" facilities, veterinary clinics, breeding, boarding and training facilities, groomers, and pet care stores.	City-wide	FY15	Completed within schedule																	
CSD-6.3	Amend BMP Design Manual for nurseries and garden centers.	City-wide	FY15	Completed within schedule																	
CSD-6.4	Amend BMP Design Manual for auto-related uses.	City-wide	FY15	One time																	
CSD-7	Develop and administer an alternative compliance program for on-site structural BMP implementation (includes identifying Watershed Management Area Analysis [WMAA] candidate projects). Refer to Section 4.2.5.	City-wide	FY15	Continuous-Ongoing																	
<b>E.4 Construction Management</b>																					
CSD-8	Administer a program to oversee implementation of temporary BMPs that control sediment and other pollutants during the construction phase of projects. Includes requirements to inspect at appropriate frequencies and effectively enforce requirements through process controlled by other City departments.	City-wide	FY16	Continuous-Ongoing																	
<b>E.5 Existing Development</b>																					
<b>Commercial, Industrial, Municipal, and Residential Facilities and Areas</b>																					
CSD-9	Administer a program to require implementation of minimum BMPs for existing development (commercial, industrial, municipal, and residential) that are specific to the facility, area types, and PGAs, as appropriate. Includes inspection of existing development at appropriate frequencies and using appropriate methods.	City-wide	FY16	Continuous-Ongoing																	

**Table I.4.3 City of San Diego Annual Schedule (continued)**

ID	Strategy	Location	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	FY 15 and Earlier	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31
CSD-9.1	Update minimum BMPs for existing residential, commercial, and industrial development. Specific updates to BMPs include required street sweeping, catch basin cleaning, and maintenance of private roads and parking lots in targeted areas.	City-wide	FY15	Continuous every 5 years/ permit cycle																	
CSD-9.2	Outreach to property managers and trash haulers to elevate the emphasis of power washing as a pollutant source.	City-wide Residential, commercial and industrial areas	FY15	Continuous-Ongoing																	
CSD-9.3	Implement property based inspections.	City-wide	Prior to FY16	Continuous-Ongoing																	
CSD-9.4	Review policies and procedures to ensure discharges from swimming pools meet permit requirements.	City-wide	FY15	Continuous- As needed																	
CSD-10	Promote and encourage implementation of designated BMPs for residential and non-residential areas.	City-wide Residential and Commercial Areas	Prior to FY16	Continuous-Ongoing																	
<b>MS4 Infrastructure</b>																					
CSD-11	Implementation of operation and maintenance activities (inspection and cleaning) for MS4 and related structures (catch basins, storm drain inlets, channels as allowed by resource agencies, detention basins, pump stations, etc.) for water quality improvement and for flood control risk management.	City-wide	FY16	Continuous-Ongoing																	
CSD-11.1	Enhanced catch basin cleaning to increase pollutant removal (up to 4 times per year) in the rainy season.	Chollas Watershed	FY16	Continuous-Ongoing																	
CSD-11.2	Increased frequency of catch basin inspection and as-needed cleaning.	Chollas Watershed (48 open channel segments)	FY13	Completed within schedule in 5 years (ends FY18)																	
CSD-11.3	Proactively repair and replace MS4 components to provide source control from MS4 infrastructure.	City-wide	FY16	Continuous-Ongoing																	
CSD-11.4	Replacement of hard assets.	City-wide	FY16	Continuous-Ongoing																	
CSD-12	Coordinate with other City departments (PUD) to implement controls to prevent infiltration of sewage into the MS4 from leaking sanitary sewers.	City-wide	FY16	Continuous-Ongoing																	

**Table I.4.3 City of San Diego Annual Schedule (continued)**

ID	Strategy	Location	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	FY 15 and Earlier	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31
CSD-12.1	Identify sewer leaks and areas for sewer pipe replacement prioritization.	City-wide	FY16	Continuous- As needed																	
<b>Roads, Streets, and Parking Lots</b>																					
CSD-13	Implement operation and maintenance activities for public streets, unpaved roads, paved roads, and paved highways.	City-wide	FY16	Continuous-Ongoing																	
CSD-13.1	Outreach to street sweeping enhancement-targeted areas.	Chollas Watershed	FY16	Continuous-Ongoing																	
CSD-13.2	Enhance street sweeping through equipment replacement (replace mechanical sweepers with regenerative air sweepers) and route optimization (sweep all routes twice per month) in targeted areas.	Chollas Watershed	FY17	Continuous-Ongoing																	
CSD-13.3	Initiate sweeping of medians on high-volume arterial roadways.	City-wide	FY17	Continuous-Ongoing																	
CSD-13.4	Implement additional street sweeping (Settlement Agreement).	Chollas Watershed	FY13	Completed within schedule in 5 years (ends FY18)																	
<b>Pesticides, Herbicides, and Fertilizer BMP Program</b>																					
CSD-14	Require implementation of BMPs to address application, storage, and disposal of pesticides, herbicides, and fertilizers on commercial, industrial, and municipal properties. Includes education, permits, and certifications.	City-wide	FY16	Continuous-Ongoing																	
<b>Retrofit and Rehabilitation in Areas of Existing Development</b>																					
CSD-15	Develop and implement a strategy to identify candidate areas of existing development appropriate for retrofitting projects and facilitate the implementation of such projects.	City-wide	FY18	Continuous-Ongoing																	
CSD-16	Develop and implement a strategy to identify candidate areas of existing development for stream, channel, or habitat rehabilitation projects and facilitate implementation of such projects.	City-wide	FY18	Continuous-Ongoing																	
<b>E.2 Illicit Discharge, Detection, and Elimination (IDDE) Program</b>																					
CSD-17	Implement Illicit Discharge, Detection, and Elimination (IDDE) Program per the JRMP. Requirements include: maintaining an MS4 map, using municipal personnel and contractors to identify and report illicit discharges, maintaining a hotline for public reporting of illicit discharges, monitoring MS4 outfalls, and investigating and addressing any illicit discharges.	City-wide	Prior to FY16	Continuous-Ongoing																	

**Table I.4.3 City of San Diego Annual Schedule (continued)**

ID	Strategy	Location	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	FY 15 and Earlier	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31
<b>E.7 Public Education and Participation (B.3.b(1)(a)(iii))</b>																					
CSD-18	Implement a public education and participation program to promote and encourage development of programs, management practices, and behaviors that reduce the discharge of pollutants in storm water prioritized by high-risk behaviors, pollutants of concern, and target audiences.	City-wide	Prior to FY16	Continuous-Ongoing																	
CSD-18.1	Continue implementation of a Pet Waste Program.	City-wide	Prior to FY16	Continuous-Ongoing																	
CSD-18.2	Promote and encourage implementation of designated BMPs in commercial and industrial areas.	City-wide Non-residential Areas	Prior to FY16	Continuous-Ongoing																	
CSD-18.3	Expand outreach to homeowners' association (HOA) common lands and HOA incentives.	City-wide	FY16	Continuous-Ongoing																	
CSD-18.4	Develop an outreach and training program for property managers responsible for HOAs and maintenance districts.	City-wide	FY16	Continuous-Ongoing																	
CSD-18.5	Enhance school and recreation-based education and outreach.	City-wide	FY15	Continuous-Ongoing																	
CSD-18.6	Develop education and outreach to reduce irrigation runoff.	City-wide	Prior to FY16	Continuous-Ongoing																	
CSD-18.7	Develop regional training for water-using mobile businesses.	City-wide	FY16	Continuous-Ongoing																	
CSD-18.8	Enhance education and outreach based on results of effectiveness survey and changing regulatory requirements.	City-wide	FY16	Continuous-Ongoing																	
CSD-18.9	Continue to promote and encourage implementation of Integrated Pest Management (IPM) for residents and businesses.	City-wide	Prior to FY16	Continuous-Ongoing																	
CSD-18.10	Improve consistency and content of websites to highlight enforceable conditions and reporting methods.	City-wide	Prior to FY16	Continuous-Ongoing																	
<b>E.6 Enforcement Response Plan</b>																					
CSD-19	Continue to implement escalating enforcement responses to compel compliance with statutes, ordinances, permits, contracts, orders, and other requirements for IDDE, development planning, construction management, and existing development in the Storm Water Code Enforcement Unit's Standard Operating Procedures (SOPs) - Enforcement Response Plan.	City-wide	Prior to FY16	Continuous-Ongoing																	
CSD-19.1	Increase enforcement of irrigation runoff.	City-wide	FY16	Continuous-Ongoing																	

**Table I.4.3 City of San Diego Annual Schedule (continued)**

ID	Strategy	Location	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	FY 15 and Earlier	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31
CSD-19.2	Increase enforcement of water-using mobile businesses.	City-wide	FY16	Continuous-Ongoing																	
CSD-20	Increase enforcement of all minimum BMPs for existing residential, commercial, and industrial development.	City-wide	FY16	Continuous- As needed																	
CSD-21	Increase enforcement associated with property-based inspections.	City-wide	FY16	Continuous-Ongoing																	
CSD-22	Increase enforcement of sweeping and maintenance of private roads and parking lots in targeted areas.	City-wide	FY16	Continuous-Ongoing																	
CSD-23	Increase identification and enforcement of actionable erosion and slope stabilization issues on private property and require stabilization and repair.	City-wide	FY16	Continuous-Ongoing																	
<b>Non-JRMP Strategies (Optional Strategies, B.3.b(1)(b))</b>																					
<b>Nonstructural Strategies</b>																					
CSD-24	Investigation and research of emerging BMP technology.	City-wide	Prior to FY16	Continuous- As needed																	
CSD-25	Approve and implement a green infrastructure policy.	City-wide	FY16 (Begin)	Continuous- As needed																	
CSD-26	Create a manual that outlines right-of-way design standards.	City-wide	FY15	Completed within schedule																	
CSD-27	Create a fund that allows habitat acquisition, protection enhancement, and restoration in conjunction with other cooperating entities including community groups, academic institutions, state county, and federal agencies, etc.	City-wide	Must be triggered	Continuous as funding allows	If triggered, begin planning, acquiring funding and resources																
CSD-28	Residential and Commercial BMP: Rain Barrel	City-wide Residential Areas	Prior to FY16	Continuous-Ongoing																	
CSD-29	Residential and Commercial BMP: Grass Replacement	City-wide Residential and Commercial Areas	Prior to FY16	Continuous-Ongoing																	
CSD-30	Residential and Commercial BMP: Downspout Disconnect	City-wide Residential and Commercial Areas	FY16	Continuous-Ongoing																	

**Table I.4.3 City of San Diego Annual Schedule (continued)**

ID	Strategy	Location	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	FY 15 and Earlier	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31
CSD-31	Residential and Commercial BMP: Microirrigation	City-wide Residential Areas	Prior to FY16	Continuous-Ongoing																	
CSD-32	Provide Onsite Water Conservation Surveys.	City-wide Residential and Commercial Areas	Prior to FY16	Continuous-Ongoing																	
CSD-33	Enhance and expand trash cleanups through community-based organizations involving target audiences.	City-wide	FY16	Continuous-Ongoing																	
CSD-34	Trash mitigation in the western portion of the Otay River HU.	Otay River HU (San Diego Bay WMA)	Prior to FY16	Continuous-Ongoing																	
CSD-35	Conduct a Comprehensive Benefits Analysis to identify benefits other than water quality that are applicable to each of the specific WQIP strategies.	City-wide	FY15	Completed within schedule																	
CSD-36	Address and clean up trash from transient encampments with collaboration from the Homeless Outreach Team.	City-wide	FY16	Continuous-Ongoing																	
CSD-37	Continue participating in source reduction initiatives.	City-wide	Prior to FY16	Continuous-Ongoing																	
CSD-37.1	Coordinate with Fleet Services to replace City-owned vehicle brake pads with copper-free brake pads as they become commercially available.	City-wide	FY18	Continuous-Ongoing																	
CSD-37.2	Develop and implement a Zinc Reduction Program.	Chollas Watershed	Must be triggered	Continuous if effective and as funding allows	If triggered, begin planning, acquiring funding and resources																
CSD-37.3	Develop and implement targeted roof replacement incentive program for Chollas Creek Watershed.	Chollas Watershed	Must be triggered	Continuous if effective and as funding allows	If triggered, begin planning, acquiring funding and resources																
CSD-38	Proactively monitor for erosion, and complete minor repair and slope stabilization on municipal property.	City-wide	FY16	Continuous-Ongoing																	
CSD-39	Conduct special studies.	City-wide	FY16	Continuous-Ongoing																	
CSD-39.1	Participate in Reference Watershed Study.	Region-wide	Prior to FY16	Completed within schedule																	

**Table I.4.3 City of San Diego Annual Schedule (continued)**

ID	Strategy	Location	Implementation or Construction Year <small>(B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))</small>	Implementation Schedule <small>(B.3.b.(3)(a)(iv))</small>	FY 15 and Earlier	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31
CSD-39.2	Conduct a Cost of Service Study.	City-wide	FY16	Completed within schedule																	
CSD-40	Conduct Sustainable Return on Investment (SROI) analysis to estimate strategies' co-benefits and impacts to the public and the private sector on a common scale.	City-wide	Must be triggered	Completed within schedule	If triggered, begin planning, acquiring funding and resources																
CSD-41	Collaborate with the County, if a County-led regional social services effort is established, to provide sanitation and trash management for individuals experiencing homelessness and determine if the program is suitable and appropriate for jurisdictional needs to meet goals.	City-wide	Must be triggered	Continuous as funding allows	If triggered, begin planning, acquiring funding and resources																
CSD-42	Participate in an assessment to determine if implementation of an urban tree canopy (UTC) program would benefit water quality and other City goals, where feasible.	City-wide	Must be triggered	Completed within schedule	If triggered, begin planning, acquiring funding and resources																
CSD-43	Conduct a feasibility study to test Permeable Friction Course (PFC), a porous asphalt that overlays impermeable asphalt.	City-wide	Must be triggered	Completed within schedule	If triggered, begin planning, acquiring funding and resources																
CSD-44	As opportunities arise and funding sources are identified, protect areas that are functioning naturally by avoiding impervious development and degradation on unpaved open space areas, creating permanent open space protections on undeveloped city-owned land, and accepting privately-owned undeveloped open areas.	City-wide	Must be triggered	Continuous as funding allows	If triggered, begin planning, acquiring funding and resources																
CSD-45	Participate in a watershed council or group if one is established.	City-wide	Must be triggered	Continuous as funding allows	If triggered, begin planning, acquiring funding and resources																
CSD-46	Prohibit introduction of invasive plants in new development and redevelopment projects.	City-wide	Prior to FY16	Continuous-Ongoing																	
<b>Structural Strategies</b>																					
CSD-47	Sunset Cliffs Erosion Control Project: Phase 1 will include restoration of natural areas to allow water percolation, and installation of site appropriate drainage devices to initiate protection of Sunset Cliffs Natural Park from soil erosion	Sunset Cliffs Natural Park	FY22	Continuous-Ongoing																	
<b>Green Infrastructure</b>																					
CSD-48	North 252 Corridor Park Phase I (Dorothy Petway Park) - Project ID 1002	Chollas Watershed	Prior to FY16	Continuous-Ongoing																	
CSD-49	43rd and Logan Roadway Improvement - Project ID 1387 (bioretention to treat a drainage area of 0.73 acre)	Chollas Watershed	FY14	Continuous-Ongoing																	

**Table I.4.3 City of San Diego Annual Schedule (continued)**

ID	Strategy	Location	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	FY 15 and Earlier	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31
CSD-50	Green lot in Southcrest Park.	Chollas Watershed	Prior to FY16	Continuous-Ongoing																	
CSD-51	Central Region Public Health Center replacement of impervious pavement with rubberized porous asphalt.	Chollas Watershed	Prior to FY16	Continuous-Ongoing																	
CSD-52	Southeast Family Resource Center bio-filtration planters	Chollas Watershed	Prior to FY16	Continuous-Ongoing																	
CSD-53	10.31 acres of bioretention have been identified as potential opportunities for green infrastructure implementation on public parcels to treat an impervious drainage area of 298.12 acres with a total storage volume with 13.56 acre-feet.	Chollas Watershed	FY18	Continuous-Ongoing																	
<b>Green Streets</b>																					
CSD-54	Beta Street	Chollas Watershed	FY17	Continuous-Ongoing																	
CSD-55	25.52 acres of green streets (12.76 acres of bioretention and 12.76 acres of permeable pavement) have been identified as potential opportunities for green street projects to treat a total drainage area of 7,260.34 acres with a total storage volume of 39.66 acre-feet.	Chollas Watershed	FY18	Continuous-Ongoing																	
<b>Multiuse Treatment Areas</b>																					
<b>Infiltration and Detention Basins</b>																					
CSD-56	A dry extended detention basin can be implemented at the Park De La Cruz and Cherokee Point Elementary School site upon detailed site assessment.	Chollas Watershed	FY18	Continuous-Ongoing																	
CSD-57	A subsurface detention basin at Joyner Elementary School can be implemented upon detailed site assessment.	Chollas Watershed	FY18	Continuous-Ongoing																	
CSD-58	A subsurface detention basin at Euclid Elementary School can be implemented upon detailed site assessment.	Chollas Watershed	FY18	Continuous-Ongoing																	
CSD-59	A subsurface detention basin at Ibarra Elementary School can be implemented upon detailed site assessment.	Chollas Watershed	FY18	Continuous-Ongoing																	
CSD-60	A subsurface detention basin at Alba Middle/High School can be implemented upon detailed site assessment.	Chollas Watershed	FY18	Continuous-Ongoing																	
CSD-61	A subsurface detention basin at Clay Park can be implemented upon detailed site assessment.	Chollas Watershed	FY18	Continuous-Ongoing																	

**Table I.4.3 City of San Diego Annual Schedule (continued)**

ID	Strategy	Location	Implementation or Construction Year <i>(B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))</i>	Implementation Schedule <i>(B.3.b.(3)(a)(iv))</i>	FY 15 and Earlier	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31
CSD-62	Memorial Park: An infiltration basin has been constructed from the parking on the west side of Memorial Park to treat a drainage area of 1.4 acres.	Chollas Watershed	FY14	Continuous-Ongoing																	
CSD-63	Memorial Skateboard Park- Addition of detention vault to treat a drainage area of 0.69 acre.	Chollas Watershed	FY15	Continuous-Ongoing																	
CSD-64	If interim load reduction goals are not met and additional multiuse treatment areas are required, an infiltration basin(s) may be considered on publicly owned open spaces in canyon areas on a case-by-case basis when no other opportunities for load reductions exist.	Chollas Watershed	Must be triggered	Continuous-Ongoing	If triggered, begin planning (acquire funding and resources, conduct site feasibility analysis and site selection) to implement multiuse treatment area projects.																
<b>Stream, Channel and Habitat Rehabilitation Projects (B.3.b.(1)(b)(iii))</b>																					
CSD-65	If interim load reduction goals are not met and additional stream, channel, and habitat rehabilitation projects are required, implement as needed.	Areas identified during feasibility studies	Must be triggered	Continuous-Ongoing	If triggered, begin planning (acquire funding and resources, conduct site feasibility analysis and site selection) to implement rehabilitation projects.																
<b>Water Quality Improvement BMPs</b>																					
<b>Proprietary BMPs</b>																					
CSD-66	43rd and Logan Roadway Improvement - Project ID 1387 (filtration units treat 5.76 acres)	Chollas (Along S 43rd street between Logan Avenue and Keeler Avenue)	FY14	Continuous-Ongoing																	
CSD-67	N Chollas Community Park Phase 1B - Project ID 855	Chollas Lake Park	Prior to FY14	Continuous-Ongoing																	
CSD-68	Lisbon Street Roadway and Utility Improvements - Project ID 858	Chollas (Imperial Avenue and Lison Street)	Prior to FY14	Continuous-Ongoing																	
CSD-69	Fire Station #12 - Project ID 989	Chollas (Willie James Jones Avenue and Imperial Avenue)	Prior to FY14	Continuous-Ongoing																	
CSD-70	Rigel St Bridge Replacement - Project ID 1008	Chollas (Rigel Street and Main Street)	Prior to FY14	Continuous-Ongoing																	

**Table I.4.3 City of San Diego Annual Schedule (continued)**

ID	Strategy	Location	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	FY 15 and Earlier	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31
<b>Dry Weather Flow Separation and Treatment Projects</b>																					
CSD-71	If interim load reduction goals are not met and additional dry weather flow separation and treatment projects are required, implement as needed.	Downstream reaches where persistent dry weather flows have been observed	Must be triggered	Continuous-Ongoing	If triggered, begin planning (acquire funding and resources, conduct site feasibility analysis and site selection) to implement dry weather flow separation projects.																
<b>Trash Segregation</b>																					
CSD-72	If interim load reduction goals are not met and additional trash segregation projects are required, implement as needed.	High-loading areas city-wide	Must be triggered	Continuous-Ongoing	If triggered, begin planning (acquire funding and resources, conduct site feasibility analysis and site selection) to implement trash segregation projects.																
<b>WMA Strategies (Optional Strategies, B.3.b.(2))</b>																					
WMA-1	Collaboration with the Regional Board.	City-wide	Prior to FY16	Continuous-Ongoing																	
WMA-2	Offsite Alternative Compliance Option (WMAA)	City-wide	Prior to FY16	Continuous-Ongoing																	
WMA-3	Collaborate with Metals TMDL RPs and the Regional Board to Adopt Site Specific Objectives	Chollas Creek	Prior to FY16	Continuous-Ongoing																	

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## **I.5 CITY OF CORONADO STRATEGIES**

The City of Coronado (Coronado) is a small beach community located on an island connected to the mainland via a tombolo, the Silver Strand. Coronado has identified strategies to address the Focused Priority Condition for swimmable waters and implement jurisdictional programs citywide. Maintaining Coronado’s streets, sanitary sewer system, storm drain system, and other infrastructure is a high priority for the City. All streets in Coronado are swept once a week, regardless of type. Special events are highly scrutinized, permitted, and conditioned, and Coronado provides extra trash receptacles and traffic control. Since 2005, all newly constructed municipal buildings have been certified LEED Silver. Coronado has also implemented permeable paving, downspout disconnects, and other BMPs on City projects. Coronado also coordinates with the Navy for beach cleanups on the Silver Strand. Strategies and implementation schedules, presented in Table I.5.1, were identified using best information available on efficiency, effectiveness, and level of effort estimated to achieve compliance with numeric goals. The adaptive management process provides the framework to evaluate progress toward meeting the goals and allows for modification of strategies. As strategies are modified, the WQIP is updated. The implementation of each strategy is contingent upon annual budget approvals and funding availability.

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**Table I.5.1 City of Coronado  
 Jurisdictional Strategies**

ID	Strategy and BMPs (B.3.b(1)(a)(ii))	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Jurisdictional or Optional	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	H/FPWQC or Pollutants Addressed							Source and Ranking (from Table 3-14) (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Trash	Bacteria	Nutrients	Metals	Sediment	Flow	Habitat		
<b>JRMP (E.2 – E.7) Strategies (E.3.b.(1)(a))</b>														
<b>E.3 Development Planning</b>														
<b>All Development Projects</b>														
	Review projects for potential sources of bacteria and require additional source control BMPs as applicable for persistent problems or areas. Also see Public Education and Participation (CO-27).	-	-	-	-	-	-	-	-	-	-	-	-	
CO-1	1. Commercial projects. Require additional source control BMPs as applicable for persistent problem or areas. BMPs may address trash enclosures, outdoor areas/facilities/uses, cleaning SOPs, employee training, and others as identified or applicable.	As projects are submitted for permitting. Funding: Storm Drain Enterprise (fees).	Jurisdictional	FY15-16	Ongoing	X	X	X			X	High sources: eating and drinking establishments animal facilities, pet waste	Community Development, Public Services and Engineering	
	2. Residential and medium risk sources: Review projects for potential sources of bacteria and require additional source control BMPs as applicable. BMPs may include landscaping modifications, impervious area maintenance, trash storage areas design/location.	As projects are submitted for permitting. May be initiated per findings or in conjunction with CO-4 and CO-39. Funding: Storm Drain Enterprise (fees). Optional strategy trigger: interim or final goal not being met or at risk of not being met as determined by assessment plan.	Optional	Triggered by Goal Assessment	FY following trigger or sooner if possible	X	X	X		X	X	Medium sources: over-irrigation or runoff potential, groundwater, residential projects.	Community Development, Public Services and Engineering	
CO-2	Implement additional requirements for development projects, as specified in the City's version of the BMP Design Manual and JRMP, to target sources of bacteria.	As projects are submitted for permitting. Funding: Storm Drain Enterprise (fees).	Jurisdictional	FY15-16	Ongoing	X	X	X			X	High sources: eating and drinking establishments animal facilities, pet waste	Community Development, Public Services and Engineering	
CO-3	Require projects within the WQSA to implement LID and source control BMPs with focus on potential bacteria sources. BMP examples include: source locations away from water's edge, pervious areas enhanced, design features for sources (e.g., trash enclosures, landscaping)	As projects are submitted for permitting. Funding: Storm Drain Enterprise (fees).	Jurisdictional	FY15-16	Ongoing	X	X	X			X	Eating and drinking establishments, animal facilities, pet waste	Community Development, Public Services and Engineering	

**Table I.5.1 City of Coronado  
 Jurisdictional Strategies (continued)**

ID	Strategy and BMPs (B.3.b(1)(a)(ii))	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Jurisdictional or Optional	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	H/FPWQC or Pollutants Addressed							Source and Ranking (from Table 3-14) (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Trash	Bacteria	Nutrients	Metals	Sediment	Flow	Habitat		
<b>Priority Development Projects (PDPs)</b>														
CO-4	Include in the BMP Design Manual BMP requirements for development projects that have a higher potential to contribute to the Priority Conditions (bacteria).	-	-	-	-	-	-	-	-	-	-	-	-	-
	1. Amend BMP Design Manual for trash areas. Require full four-sided and/or covered enclosure, away from storm drains.	As projects are submitted for permitting. Funding: Storm Drain Enterprise (fees).	Jurisdictional	FY15-16	Ongoing	X	X	X					High sources: eating and drinking establishments animal facilities	Community Development, Public Services and Engineering
	2. Amend BMP Design Manual for animal-related facilities, such as such as animal shelters, "doggie day care" facilities, veterinary clinics, breeding, boarding and training facilities, and pet care stores to address sources in outdoor areas, activities, storage, and other as applicable.	As projects are submitted for permitting. Funding: Storm Drain Enterprise (fees).	Jurisdictional	FY15-16	Ongoing	X	X	X					High sources: animal facilities, pet waste	Community Development, Public Services and Engineering
	3. Amend Coronado Municipal Code (CMC) to support additional requirements in the BMP Design Manual targeting Priority Conditions as identified through plan review and field inspections.	As projects are submitted for permitting. Funding: Storm Drain Enterprise. Optional strategy trigger: interim or final goal not being met or at risk of not being met as determined by assessment plan.	Optional	Triggered by Goal Assessment	FY following trigger or sooner if possible	X	X	X		X	X		High sources: eating and drinking establishments, animal care facilities, pet waste. Medium sources: over-irrigation or runoff potential, groundwater, residential projects.	Community Development, Public Services and Engineering

**Table I.5.1 City of Coronado  
 Jurisdictional Strategies (continued)**

ID	Strategy and BMPs (B.3.b(1)(a)(ii))	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Jurisdictional or Optional	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	H/FPWQC or Pollutants Addressed							Source and Ranking (from Table 3-14) (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Trash	Bacteria	Nutrients	Metals	Sediment	Flow	Habitat		
<b>Construction Management</b>														
CO-5	Target permitting and inspection program to identify bacteria sources, and require construction projects within the WQSA to be identified as High Threat to water quality and implement appropriate BMPs for bacteria sources (e.g. location of portable toilets). Note: majority of construction in WQSA is residential or eating and drinking establishments. See Attachment 1 for minimum BMPs.	As projects are submitted for permitting and inspected. Funding: Storm Drain Enterprise.	Jurisdictional	FY15-16	Ongoing		X	X					High sources: eating and drinking establishments, sewage infrastructure & activities (indirectly), residential areas	Community Development, Public Services and Engineering
<b>Existing Development</b>														
<b>Commercial and Residential Facilities and Areas</b>														
CO-7	Implement inspections for identified high priority sources of bacteria (compared to annual inspection core program frequency) within specific drainage basins (e.g., Tidelands), as applicable. Require implementation of BMPs in Attachment 1 as applicable.	Additional targeted, biannual inspections for specific sources and drainage basins as identified through routine annual inspections Funding: Storm Drain Enterprise	Jurisdictional	FY15-16	Bi-annually	X	X	X			X		High sources: eating and drinking establishments, pet waste. Medium sources: over-irrigation or runoff potential, groundwater, residential projects.	Public Services and Engineering
CO-8	Evaluate sweeping and maintenance of private roads and parking lots in targeted areas to identify and require additional BMPs (case-by-case basis): sweeping frequency, type of sweeper, inlet protection. Consider adding private roads to City sweeping program, based on funding availability.	Based on residential inspection results assessment. Funding: Storm Drain Enterprise, if available may require City Council approval. Optional Triggers: 1) residential inspection results; 2) interim or final goal not being met or at risk of not being met as determined by assessment plan.	Optional	Triggered by inspection results and goal assessment	FY following trigger or sooner if possible	X	X		X	X			High Sources: commercial Medium sources: residential areas	Public Services and Engineering,

**Table I.5.1 City of Coronado  
 Jurisdictional Strategies (continued)**

ID	Strategy and BMPs (B.3.b(1)(a)(ii))	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Jurisdictional or Optional	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	H/FPWQC or Pollutants Addressed							Source and Ranking (from Table 3-14) (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Trash	Bacteria	Nutrients	Metals	Sediment	Flow	Habitat		
CO-9	Implement program that will require sources to retrofit trash enclosures when identified to be persistent and problematic sources through annual or complaint inspections (when public education, employee training, etc. are insufficient solutions) Also see CO-37.	As needed, through annual, routine inspections Funding: Storm Drain Enterprise.	Jurisdictional	FY15-16	Ongoing	X	X	X					High sources: Eating and drinking establishments Animal facilities	Public Services and Engineering, Community Development
CO-10	1. Maintain existing pet waste program. Including new installation and maintenance of pet waste bag dispensers and trash bins (as BMPs) to enhance legal disposal in targeted areas based on inspection results. Also see CO-36.2.	Continuous. Funding: Storm Drain Enterprise. Triggers: based on park and beach facility inspection results and continued non-compliance or new areas/sources.	Jurisdictional	FY15-16	Ongoing	X	X						High source: pet waste Medium source: Residential target audience	Public Services and Engineering
	2. Enhanced or new signage and education (see CO-27 and CO-29), promoting physical removal of pet waste by pet owners.	Based on inspection assessment. Funding: Storm Drain Enterprise (fees). Optional Triggers: 1) park and beach facility inspection results and continued non-compliance; 2) interim or final goal not being met or at risk of not being met as determined by assessment plan.	Optional	Triggered by inspection results and goal assessment	FY following trigger or sooner if possible	X	X						High source: pet waste Medium source: Residential target audience	Public Services and Engineering
CO-11	Promote with water purveyor, as available, residential source control program [BMPs for over-irrigation (smart controllers), rainwater harvesting, and turf conversion] that may include a rebate programs in target areas. Also see CO-43.	As needed and available. Funding: Storm Drain Enterprise and General Fund	Jurisdictional	FY15-16	Ongoing		X	X			X		Medium sources: residential, over-irrigation/ runoff	Public Services and Engineering

**Table I.5.1 City of Coronado  
 Jurisdictional Strategies (continued)**

ID	Strategy and BMPs (B.3.b(1)(a)(ii))	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Jurisdictional or Optional	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	H/FPWQC or Pollutants Addressed							Source and Ranking (from Table 3-14) (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))	
						Trash	Bacteria	Nutrients	Metals	Sediment	Flow	Habitat			
CO-12	Implement inspections of City Marina land based areas under City jurisdiction - inlets, pump station and trash areas. Require BMPs as applicable per Attachment 1.	Additional targeted, bi-annual inspections for specific sources as identified. Funding: Storm Drain Enterprise	Jurisdictional	FY15-16	Bi-annually	X	X	X				X		High sources: eating and drinking establishments, pet waste, sewage infrastructure & activities. Medium sources: boat waste discharges (indirect/ land based)	Public Services and Engineering
<b>Municipal Facilities and Areas</b>															
CO-13	1. Conduct enhanced beach maintenance activities to remove trash and debris, additional trash cans during peak periods, and replenish dog bag dispensers.	Continuous with daily patrols Funding: Storm Drain Enterprise and General Fund	Jurisdictional	FY15-16	Ongoing	X	X							High source: pet waste	Public Services and Engineering
	2. Implement inspection and preventative maintenance (PM) program to prevent sewer system backups and spills in from municipal/public restrooms.	Continuous with inspections twice weekly. Funding: Storm Drain Enterprise, Wastewater Enterprise Fund, and General Fund	Jurisdictional	FY15-16	Ongoing	X	X							High source: sewage infrastructure & activities	Public Services and Engineering
	3. Implement beach patrols for trash, debris and pet waste removal.	Continuous with daily patrols Funding: General Fund	Jurisdictional	FY15-16	Ongoing	X	X							High source: pet waste	Public Services and Engineering
CO-14	Identify Focused Priority Conditions in municipal facilities and areas to identified specific BMPs to reduce sources (e.g., special events). BMPs included in Attachment 1.	Based on pre-planning/permitting meeting and municipal inspection assessment during each event. Funding: Storm Drain Enterprise (fees). Optional Triggers: 1) park and beach facility inspection results and continued non-compliance, other municipal facilities and operations, special events; 2) interim or final goal not being met or at risk of not being met as determined by assessment plan.	Optional	Triggered by inspection results and goal assessment	FY following trigger or sooner if possible	X	X	X						High source: pet waste, sewage infrastructure & activities	Public Services and Engineering
CO-6	Implement park restroom inspection and cleaning to prevent sewer spill discharges to the MS4 and remove trash/waste.	Continuous with daily inspections and cleaning. Funding: General Fund	Jurisdictional	FY15-16	Ongoing	X	X	X						High source: sewage infrastructure & activities	Public Services and Engineering

**Table I.5.1 City of Coronado  
 Jurisdictional Strategies (continued)**

ID	Strategy and BMPs (B.3.b(1)(a)(ii))	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Jurisdictional or Optional	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	H/FPWQC or Pollutants Addressed							Source and Ranking (from Table 3-14) (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Trash	Bacteria	Nutrients	Metals	Sediment	Flow	Habitat		
<b>MS4 Infrastructure</b>														
	Implement operation and maintenance activities (inspection and cleaning) for MS4 and related structures (catch basins, storm drain inlets, diversion structures, etc.) for optimum water quality. BMPs in Attachment 1 implemented as applicable.	Jurisdictional programs are for City staff and include SOPs, forms, schedules found in JRMP Section 6.5.6 and the Storm Water Standards Manual Sections 6-A and 6-B.	-	-	-	-	-	-	-	-	-	-	-	-
CO-15	1. Perform MS4 inspection and cleaning at higher frequency (instead of annually) for high debris areas.	Continuous with monthly inspections Funding: Storm Drain Enterprise.	Jurisdictional	FY15-16	Ongoing	X	X			X	X		High source: residential areas Medium sources: over-irrigation/ runoff, groundwater contribution	Public Services and Engineering
	2. Evaluate MS4 inspection and cleaning locations and adjust high frequency to target new/modified high debris areas.	Continuous, at minimum biannually. Funding: Storm Drain Enterprise.	Jurisdictional	FY15-16	Ongoing	X	X			X	X		High source: residential areas Medium sources: over-irrigation/ runoff, groundwater contribution	Public Services and Engineering
	3. Proactively repair and replace MS4 components to maintain proper operation and function.	Continuous. Funding: Storm Drain Enterprise.	Jurisdictional	FY15-16	Ongoing	X	X			X	X		High source: residential areas Medium sources: over-irrigation/ runoff, groundwater contribution	Public Services and Engineering

**Table I.5.1 City of Coronado  
 Jurisdictional Strategies (continued)**

ID	Strategy and BMPs (B.3.b(1)(a)(ii))	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Jurisdictional or Optional	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	H/FPWQC or Pollutants Addressed							Source and Ranking (from Table 3-14) (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Trash	Bacteria	Nutrients	Metals	Sediment	Flow	Habitat		
CO-15	4. Proactively operate, maintain, repair and replace urban runoff diverters to sanitary sewer.	Continuous. Funding: Storm Drain Enterprise and/or Wastewater Enterprise Fund	Jurisdictional	FY15-16	Ongoing	X	X			X	X	High source: residential areas, sewage infrastructure and activities Medium sources: over-irrigation/ runoff, groundwater contribution	Public Services and Engineering	
	5. Proactively repair and replace corrugated metal pipe (CMP) MS4 components to provide source control from MS4 infrastructure (mitigate groundwater infiltration and reduce diversion flow to sewer system).	Continuous. Funding: Storm Drain Enterprise.	Jurisdictional	FY15-16	Ongoing	X	X			X	X	High source: sewage infrastructure and activities Medium sources: over-irrigation/ runoff, groundwater contribution	Public Services and Engineering	
CO-16	Implement operation and maintenance activities (inspection and cleaning) for Sanitary Sewer System and related structures for optimum operation.	Continuous. Monthly in priority areas and entire system annually (phased). Funding: Wastewater Enterprise Fund	Jurisdictional	FY15-16	Ongoing	X	X	X	X		X	High source: sewage infrastructure and activities	Public Services and Engineering	
CO-17	Implement controls to prevent infiltration of sewage into the MS4 from leaking sanitary sewers.	Continuous. Funding: Wastewater Enterprise Fund	Jurisdictional	FY15-16	Ongoing	X	X	X	X		X	High source: sewage infrastructure and activities	Public Services and Engineering	
CO-18	Identify sewer leaks and areas for sewer pipe replacement prioritization and timely repair. Sewerage infrastructure overflow prevention.	Continuous. Funding: Wastewater Enterprise Fund	Jurisdictional	FY15-16	Ongoing	X	X	X	X	X	X	High source: sewage infrastructure and activities	Public Services and Engineering	

**Table I.5.1 City of Coronado  
 Jurisdictional Strategies (continued)**

ID	Strategy and BMPs (B.3.b(1)(a)(ii))	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Jurisdictional or Optional	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	H/FPWQC or Pollutants Addressed							Source and Ranking (from Table 3-14) (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Trash	Bacteria	Nutrients	Metals	Sediment	Flow	Habitat		
<b>Roads, Streets, Parking Lots</b>														
CO-19	Perform sweeping of high-volume streets and hardscape cleaning at enhanced frequency. Indirect, positive impact in commercial area including eating and drinking establishments. See Attachment 1 for BMPs.	Continuous with weekly frequency in high volume areas. Funding: Storm Drain Enterprise.	Jurisdictional	FY15-16	Ongoing	X	X			X	X		High source: eating and drinking establishment (indirectly), residential areas	Public Services and Engineering
CO-21	Implement maintenance of bike lanes by proactively monitoring for erosion and completing minor repair and slope stabilization. See Attachment 1 for BMPs.	Continuous. Funding: General Fund	Jurisdictional	FY15-16	Ongoing		X			X			Low source: open space/ recreational land uses	Public Services and Engineering
<b>Illicit Discharge, Detection, and Elimination (IDDE) Program</b>														
CO-23	Conduct inspections in targeted areas designated as high priority for IDDEs. Follow-up with outreach/education (see CO-22, CO-25 and CO-26) as applicable. Also see CO-37. BMPs listed in Attachment 1.	Continuous. IDDE summer-dry weather residential and commercial inspections. Funding: Storm Drain Enterprise.	Jurisdictional	FY15-16	Ongoing		X	X			X		High sources: eating and drinking establishments, pet waste, animal facilities Medium sources: residential, over-irrigation/ runoff	Public Services and Engineering
CO-24	Conduct "off-hours" inspections to identify and eliminate illicit discharges. See BMPs in Attachment 1.	Continuous. Summer-dry weather residential and commercial inspections/patrols twice during the period. Funding: Storm Drain Enterprise.	Jurisdictional	FY15-16	Ongoing	X	X	X			X		High sources: eating and drinking establishments, pet waste, animal facilities Medium sources: residential, over-irrigation/ runoff	Public Services and Engineering
<b>Public Education and Participation</b>														
CO-20	Implement street sweeping public education, temporary posting and towing as needed to accomplish sweeping goals. Also see CO-37.	Continuous. Funding: Storm Drain Enterprise.	Jurisdictional	FY15-16	Ongoing	X	X			X	X		High source: eating and drinking establishment (indirectly), residential areas	Public Services and Engineering

**Table I.5.1 City of Coronado  
 Jurisdictional Strategies (continued)**

ID	Strategy and BMPs (B.3.b(1)(a)(ii))	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Jurisdictional or Optional	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	H/FPWQC or Pollutants Addressed							Source and Ranking (from Table 3-14) (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Trash	Bacteria	Nutrients	Metals	Sediment	Flow	Habitat		
CO-22	Promote and maintain website to encourage residents to report potential illicit discharges, over-irrigation/runoff or other storm water violations.	Continuous. Funding: General Fund and Storm Drain Enterprise Fund	Jurisdictional	FY15-16	Ongoing		X	X		X	X		High source: pet waste Medium source: residential, over-irrigation/ runoff	Public Services and Engineering
CO-25	Implement targeted public education and participation program to promote existing and new programs, BMPs (see Attachment 1), and behaviors that reduce the discharge of pollutants in storm water from high-risk behaviors, pollutants of concern, and target audiences.	Based on inspection assessment. Funding: Storm Drain Enterprise (fees). Optional Triggers: 1) commercial facility and residential areas inspection results and continued non-compliance; 2) interim or final goal not being met or at risk of not being met as determined by assessment plan.	Optional	Triggered by inspection results and goal assessment	FY following trigger or sooner if possible	X	X	X			X		High source: eating and drinking establishments, animal facilities, pet waste Medium source: Residential, over-irrigation/ runoff	Public Services and Engineering
CO-26	Develop an outreach and training program for property managers responsible for HOAs targeting sources of bacteria and illegal discharges (e.g., impervious area wash down, trash management, pet waste, over-irrigation runoff) through specific BMPs (Attachment 1) for site conditions, design, etc. Assess "turnover" of property managers.	Continuous. Initial outreach (one-time), repeat as needed based on residential area inspection/drive-by results in following years. Funding source: Storm Drain Enterprise	Jurisdictional	FY16-17	FY16-17 initial. Repeat as needed	X	X	X		X	X		High source: pet waste Medium source: residential, over-irrigation/ runoff	Public Services and Engineering
CO-27	Support trash and pet waste cleanups through community-based organizations involving target audiences. North Beach (Dog Beach) location.	Continuous. Funding source: General Fund	Jurisdictional/Sub-watershed	FY16-17	FY16-17	X	X						High source: pet waste	Public Services and Engineering
CO-2	Include staff training to target identification of bacteria pollutant sources during development and building project permitting. Staff training will be conducted, tailored to job duties. See BMP Design Manual.	Training will occur prior to BMP Design Manual implementation, within 3 months of the start of implementation if needed, and annually thereafter. Funding: Storm Drain Enterprise.	Jurisdictional	FY15-16	Ongoing	X	X	X		X	X		High sources: eating and drinking establishments, animal facilities, pet waste	Community Development, Public Services and Engineering
CO-28	Improve consistency and content of Coronado HA websites to highlight enforceable conditions and reporting methods for source of bacteria.	Continuous. Initial effort (one-time) Funding source: Storm Drain Enterprise Trigger for as needed: interim or final goal not being met or at risk of not being met as determined by assessment plan.	Jurisdictional/Sub-watershed	FY16-17	FY16-17 initial. Repeat as needed		X						High source: pet waste	Public Services and Engineering

**Table I.5.1 City of Coronado  
 Jurisdictional Strategies (continued)**

ID	Strategy and BMPs (B.3.b(1)(a)(ii))	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Jurisdictional or Optional	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	H/FPWQC or Pollutants Addressed							Source and Ranking (from Table 3-14) (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Trash	Bacteria	Nutrients	Metals	Sediment	Flow	Habitat		
CO-29	Target education toward activities and human behavior (e.g. signage) in beaches/parks and other public areas including trash reduction, bacteria sources (pet waste removal) or other high impact behavior to habitat, wildlife, and water quality (e.g., no feeding of wildlife).	Continuous. Initial effort (one-time) Funding source: Storm Drain Enterprise, General Fund Trigger for as needed: interim or final goal not being met or at risk of not being met as determined by assessment plan.	Jurisdictional/ Sub-watershed	FY16-17	FY16-17 initial. Repeat as needed		X					X	High source: pet waste	Public Services and Engineering
CO-30	Engage with the Main Street Association to promote BMPs - activities and good housekeeping practices -associated with bacteria sources (impervious area cleaning SOPs, outdoor dining areas, trash areas). See Attachment 1 for BMPs.	Continuous. Initial effort (one-time) Funding source: Storm Drain Enterprise, General Fund Trigger for as needed: interim or final goal not being met or at risk of not being met as determined by assessment plan.	Jurisdictional	FY16-17	FY16-17 initial. Repeat as needed		X						High source: eating and drinking establishments, Medium source: over-irrigation/runoff Low sources: general retail	Public Services and Engineering
CO-31	Collaborate with regional, watershed or sub-watershed education and outreach efforts that targets bacteria, including educational/outreach opportunities associated with regional efforts for bacteria TMDL, as applicable.	Funding source: Storm Drain Enterprise Trigger for optional: interim or final goal not being met or at risk of not being met as determined by assessment plan.	Optional	Triggered by goal assessment	FY following trigger or sooner if possible		X						High source: pet waste, animal facilities, eating and drinking establishments, sewage infrastructure & activities, others as applicable	Public Services and Engineering
CO-32	Develop and/or distribute existing materials (from other agencies/groups) education and outreach to reduce over-irrigation/runoff. Assess effectiveness in pilot/target area(s).	Continuous. Initial outreach (one-time), repeat as needed based on residential area inspection/drive-by results in following years. Funding source: Storm Drain Enterprise	Jurisdictional	FY15-16	FY15-16 initial. Repeat as needed		X				X		Medium source: residential, over-irrigation/ runoff	Public Services and Engineering
CO-33	Provide municipal staff training to select groups based on job duties and activities with emphasis on Focused Priority Conditions (bacteria).	Continuous. Initial outreach (one-time), repeat as needed based on municipal facility and other inspections in following years. Funding source: Storm Drain Enterprise	Jurisdictional	FY15-16	FY15-16 initial. Repeat as needed	X	X	X		X	X		High source: pet waste, sewage infrastructure & activities Medium source: over-irrigation/ runoff	Public Services and Engineering

**Table I.5.1 City of Coronado  
 Jurisdictional Strategies (continued)**

ID	Strategy and BMPs (B.3.b(1)(a)(ii))	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Jurisdictional or Optional	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	H/FPWQC or Pollutants Addressed							Source and Ranking (from Table 3-14) (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Trash	Bacteria	Nutrients	Metals	Sediment	Flow	Habitat		
CO-34	Conduct public surveys related to swimmable waters. Tailor education and outreach based on results of surveys.	Continuous. Initial survey (one-time), repeat as needed based on need. Tailor outreach as needed. Funding source: Storm Drain Enterprise	Jurisdictional	FY17-18	FY17-18 initial. Repeat as needed	X	X	X		X	X		High source: eating and drinking establishments, animal facilities, pet waste, Medium source: residential areas	Public Services and Engineering
CO-35	Provide technical education and outreach to the development community on the design and implementation requirements with an emphasis on Focused Priority Conditions (bacteria).	Continuous. Initial outreach (one-time), repeat as needed based on development permit submittal and inspections in following years. Funding source: Storm Drain Enterprise	Jurisdictional	FY15-16	FY15-16 initial. Repeat as needed	X	X	X		X	X		High source: eating and drinking establishments, animal facilities, pet waste, Medium source: over-irrigation/ runoff, groundwater, residential areas	Public Services and Engineering
<b>Incentive Programs</b>														
CO-43	Incentive programs or opportunities. Includes programs with water purveyor for water conservation/over-irrigation, runoff (see CO-11). Other incentive programs as they become available.	As needed and available. Funding: Storm Drain Enterprise, General Fund	Jurisdictional	FY15-16	Ongoing		X	X			X		Medium sources: residential, over-irrigation/ runoff	Public Services and Engineering
CO-44	Provide pet waste bags to owners at dog-friendly facilities (dog beach and dog runs).	As needed. Continuous. Funding: General Fund	Jurisdictional	FY15-16	Ongoing		X						High source: pet waste	Public Services and Engineering
<b>Retrofit and Rehabilitation in Areas of Existing Development</b>														
CO-46	Evaluate street infrastructure replacement or repairs for retrofit opportunities	Projects may include green streets and similar retrofit opportunities (e.g., porous pavement), as capital improvement plans are updated and implemented. Funding: General Fund, Grants and Others	Jurisdictional	FY-16-17	On-going	X	X	X		X	X		Medium sources: over-irrigation or runoff potential.	Public Services and Engineering

**Table I.5.1 City of Coronado  
 Jurisdictional Strategies (continued)**

ID	Strategy and BMPs (B.3.b(1)(a)(ii))	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Jurisdictional or Optional	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	H/FPWQC or Pollutants Addressed							Source and Ranking (from Table 3-14) (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Trash	Bacteria	Nutrients	Metals	Sediment	Flow	Habitat		
CO-47	Implement a strategy to include incentives or programs to retrofit existing development, and identify candidate areas or projects	Offsite Alternative Compliance Program, when available, will include incentives and projects to encourage or implement projects to retrofit existing development sites in the City. Incentives may include public and/or private projects or sites. Existing development retrofit project selection will be based upon a variety of factors including project size, project location, pollutant reduction potential (compared to existing conditions), cost, funding, cost-benefit analysis, public perception and acceptance (especially for public sites/projects) and feasibility of implementation. The program will include protocols related to funding mechanisms for project construction and long-term maintenance, payment and credit structures, and water quality equivalency standards. Refer to JRMP Storm Water Standards Manual, Section 4.D Funding: Storm Drain Enterprise and General Fund	Jurisdictional	Project List FY16-17 Policy and Procedures FYs 16-17 and 17-18 (upon availability of regional guidance)	Ongoing	X	X	X		X	X		High source: pet waste  Medium sources: residential, over-irrigation/ runoff	Public Services and Engineering, and Community Development
CO-48	Proactively repair, replace, and retrofit MS4 components to maintain proper operation and function for reduction of infiltration.	As needed and available. Funding: Storm Drain Enterprise and General Fund	Jurisdictional	Triggered by infrastructure assessment or other determination	Following CIP revision or sooner if possible	X	X	X		X	X		Medium sources: over-irrigation or runoff potential.	Community Development, Public Services and Engineering

**Table I.5.1 City of Coronado  
 Jurisdictional Strategies (continued)**

ID	Strategy and BMPs (B.3.b(1)(a)(ii))	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Jurisdictional or Optional	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	H/FPWQC or Pollutants Addressed							Source and Ranking (from Table 3-14) (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Trash	Bacteria	Nutrients	Metals	Sediment	Flow	Habitat		
CO-49	Promote with water purveyor, as available, residential retrofit to reduce irrigation and over-irrigation runoff (smart controllers), rainwater harvesting, and turf conversion that may include a rebate programs in target areas.	As needed and available. Funding: Storm Drain Enterprise and General Fund	Jurisdictional	FY15-16	Ongoing		X	X				X	Medium sources: residential, over-irrigation/ runoff	Public Services and Engineering
CO-50	Implement program that will require sources to retrofit trash enclosures when identified to be persistent and problematic sources through annual or complaint inspections (when public education, employee training, etc. are insufficient solutions)	As needed, through annual, routine inspections Funding: Storm Drain Enterprise.	Jurisdictional	FY15-16	Ongoing	X	X	X					High sources: Eating and drinking establishments Animal facilities	Public Services and Engineering, Community Development
CO-51	Commercial redevelopment projects. Require additional source control BMPs as applicable for persistent problem or areas. May include retrofit of trash enclosures, outdoor areas/facilities/uses to address pollutants of concern (including bacteria).	As projects are submitted for permitting. Funding: Storm Drain Enterprise (fees).	Jurisdictional	FY15-16	Ongoing	X	X	X			X		High sources: eating and drinking establishments animal facilities, pet waste	Community Development, Public Services and Engineering
CO-52	Residential and medium risk sources: Review projects for potential sources of bacteria and require retrofit of areas, if appropriate, Retrofits may include landscaping modifications, impervious area retrofit, trash storage areas design/location or retrofit.	As projects are submitted for permitting or identified through inspection as persistent and problematic. Funding: Storm Drain Enterprise (fees). Optional strategy trigger: interim or final goal not being met or at risk of not being met as determined by assessment plan.	Optional	Triggered by Goal Assessment	FY following trigger or sooner if possible	X	X	X		X	X		Medium sources: over-irrigation or runoff potential, groundwater, residential projects.	Community Development, Public Services and Engineering

**Table I.5.1 City of Coronado  
 Jurisdictional Strategies (continued)**

ID	Strategy and BMPs (B.3.b(1)(a)(ii))	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Jurisdictional or Optional	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	H/FPWQC or Pollutants Addressed							Source and Ranking (from Table 3-14) (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Trash	Bacteria	Nutrients	Metals	Sediment	Flow	Habitat		
<b>Enforcement Response Plan</b>														
CO-36	Implement escalating enforcement responses to compel compliance with statutes, ordinances, permits, contracts, orders, and other requirements for IDDE, development planning, construction management, and existing development in the Enforcement Response Plan. Implement additional strategies such as:	As needed. Continuous. Funding: General Fund, Storm Drain Enterprise Fund	Jurisdictional	FY15-16	Ongoing	X	X	X	X	X	X		High sources: Eating and drinking establishments, pet waste, animal facilities, sewage infrastructure & activities. Medium sources: over-irrigation/runoff, residential areas, homeless encampments, groundwater contribution	Public Services and Engineering, City Attorney, Code Enforcement
	1. Increase enforcement and patrols of over-irrigation/runoff.	Continuous. Summer-dry weather residential and commercial inspections/patrols twice during period. Funding: Storm Drain Enterprise Fund Funding: General Fund, Storm Drain Enterprise Fund	Jurisdictional	FY15-16	Ongoing	X	X	X	X	X	X		Medium sources: over-irrigation/ runoff, residential areas	Public Services and Engineering, City Attorney, Code Enforcement
	2. Focus locally on patrols and enforcement of water-using mobile businesses.	Continuous. Summer-dry weather residential and commercial inspections/patrols twice monthly. Funding: Storm Drain Enterprise Fund Funding: General Fund, Storm Drain Enterprise Fund	Jurisdictional	FY15-16	Ongoing	X	X	X	X	X	X		High sources: animal facilities, pet waste. Medium sources: residential areas	Public Services and Engineering, City Attorney, Code Enforcement
	3. Issue NOVs for private property sanitary sewer overflows.	As applicable. Continuous. Funding: General Fund, Storm Drain Enterprise Fund	Jurisdictional	FY15-16	Ongoing	X	X	X	X	X	X		High sources: sewage infrastructure & activities, pet waste. Medium sources: residential areas	Public Services and Engineering, City Attorney, Code Enforcement

**Table I.5.1 City of Coronado  
 Jurisdictional Strategies (continued)**

ID	Strategy and BMPs (B.3.b(1)(a)(ii))	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Jurisdictional or Optional	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	H/FPWQC or Pollutants Addressed							Source and Ranking (from Table 3-14) (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Trash	Bacteria	Nutrients	Metals	Sediment	Flow	Habitat		
CO-36	4. Police patrols (code enforcement) targeting dog owners using unauthorized parks for pets as approved by City (signage posted and no dog waste dispersers are available).	As needed. Continuous. Funding: General Fund, Storm Drain Enterprise Fund	Jurisdictional	FY15-16	Ongoing	X	X	X	X	X	X		High sources: pet waste. Medium sources: residential areas	Public Services and Engineering, City Attorney, Code Enforcement
CO-37	Enforce minimum BMPs for existing residential and commercial development as identified in strategies and JRMP. Includes retrofit of trash enclosures (CO-9), no parking on street sweeping days (CO-20), IDDE summer-dry weather inspections (CO-23), eating and drinking establishments (dry sweeping/mop impervious areas/spills within right of way). See BMPs in Attach.1.	Continuous. Funding: Storm Drain Enterprise.	Jurisdictional	FY15-16	Ongoing	X	X	X	X	X	X		High sources: eating and drinking establishments, animal facilities. Medium sources: residential areas, over-irrigation/ runoff	Public Services and Engineering, City Attorney, Code Enforcement, Community Development
<b>Additional Nonstructural Strategies</b>														
CO-38	Address and clean up homeless encampments to eliminate bacteria sources.	Continuous. Funding: General Fund, Storm Drain Enterprise	Jurisdictional	FY15-16	Ongoing	X	X	X	X	X	X		High sources: pet waste. Medium sources: homeless encampments	Public Services and Engineering, City Attorney, Code Enforcement, Community Development

**Table I.5.1 City of Coronado  
 Jurisdictional Strategies (continued)**

ID	Strategy and BMPs (B.3.b(1)(a)(ii))	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Jurisdictional or Optional	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	H/FPWQC or Pollutants Addressed							Source and Ranking (from Table 3-14) (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Trash	Bacteria	Nutrients	Metals	Sediment	Flow	Habitat		
CO-39	Conduct special studies related to bacteria sources and reduction measures, as applicable.	-	-	-	-	-	-	-	-	-	-	-	-	
	1. Conduct a reference watershed study.	Funding: Storm Drain Enterprise Trigger for optional: interim or final goal not being met or at risk of not being met as determined by assessment plan.	Optional - Otay River HU	TBD	TBD		X					NA	Public Services and Engineering	
	2. Evaluate Tidelands Park data and delisting.	Continuous. Funding: Storm Drain Enterprise	Coronado HA/ Jurisdictional	FY15-16	Ongoing. No later than FY23		X					NA	Public Services and Engineering	
	3. Evaluate Tidelands Park outfall drainage basin for sources of bacteria, IDDE (including over irrigation), animal waste (birds, pets).	Continuous. Funding: Storm Drain Enterprise	Drainage basin/ Jurisdictional	FY15-16	Ongoing.		X			X		High source: pet waste, sewage infrastructure & activities Medium source: over-irrigation/ runoff, residential, groundwater	Public Services and Engineering	
	4. Evaluate drainage system including condition of MS4 pipes draining to Tidelands Park outfall.	Continuous. Funding: Storm Drain Enterprise	Drainage basin/ Jurisdictional	FY15-16	Ongoing.		X			X		High source: sewage infrastructure & activities Medium source: groundwater	Public Services and Engineering	
	5. Develop work plan and/or revised strategies to address sources and conditions at Tidelands Park outfall based on finding (2-4 above).	Continuous. Funding: Storm Drain Enterprise	Drainage basin/ Jurisdictional	FY15-16	Ongoing.		X			X		NA	Public Services and Engineering	

**Table I.5.1 City of Coronado  
 Jurisdictional Strategies (continued)**

ID	Strategy and BMPs (B.3.b(1)(a)(ii))	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Jurisdictional or Optional	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	H/FPWQC or Pollutants Addressed							Source and Ranking (from Table 3-14) (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Trash	Bacteria	Nutrients	Metals	Sediment	Flow	Habitat		
CO-39	6. Evaluate with POSD conditions and sources in the drainage basin to Tidelands Park outfall, as applicable.	Continuous. Funding: Storm Drain Enterprise	Drainage basin/ Jurisdictional	FY15-16	Ongoing.		X					X	High source: pet waste, sewage infrastructure & activities Medium source: over-irrigation/ runoff, residential, groundwater	Public Services and Engineering
	7. Evaluate data gaps and monitoring plan options for delisting of Tidelands Park.	Continuous. Funding: Storm Drain Enterprise	Coronado HA/ Jurisdictional	FY15-16	Ongoing.		X						NA	Public Services and Engineering
CO-40	Implement, as applicable, programs or BMPs with the Navy on water quality-related issues to benefit targeted sources, including bacteria. See Attachment 1 for BMPs.	Continuous. Funding: Storm Drain Enterprise	Jurisdictional	FY15-16	Ongoing.	X	X	X	X	X	X	X	NA	Public Services and Engineering
CO-41	Implement, as applicable, with the Caltrans on water quality-related issues to benefit water quality, including bacteria.	Continuous. Funding: Storm Drain Enterprise	Jurisdictional	FY15-16	Ongoing.	X	X	X	X	X	X	X	NA	Public Services and Engineering
CO-42	If invasive plant and pest removal is necessary in key locations, implement remedial measures.	Continuous. Funding: Storm Drain Enterprise	Jurisdictional	FY15-16	Ongoing.		X	X		X		X	NA	Public Services and Engineering Community Development
CO-45	Collaborate, as applicable, with the Regional Board on water quality-related issues to benefit water quality, including bacteria.	Continuous. Funding: Storm Drain Enterprise	Jurisdictional	FY15-16	On-going.	X	X	X	X	X	X	X	NA	Public Services and Engineering
	Non-JRMP Strategies (Optional Strategies, Provision B.3.b.(1)(b))													

**Table I.5.1 City of Coronado  
 Jurisdictional Strategies (continued)**

ID	Strategy and BMPs (B.3.b(1)(a)(ii))	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Jurisdictional or Optional	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	H/FPWQC or Pollutants Addressed							Source and Ranking (from Table 3-14) (B.3.b(1)(a)(i))	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Trash	Bacteria	Nutrients	Metals	Sediment	Flow	Habitat		
CO-53	Implement stream, channel, and habitat rehabilitation projects as needed.	This strategy may be triggered if: 1) Interim goals are not met, 2) Stream or habitat rehabilitation is determined to be a more effective pathway, relative to additional structural or non-structural BMPs to meeting bacterial indicator goals, 3) Funding and staffing has been secured, 4) Partners, MOUs, and permits required by regulatory agencies are secured, and 5) Recommendations from the community are identified and consensus and community support has been achieved. Will occur in areas identified during feasibility studies. The following resources, funds, and steps are needed to implement this strategy if the above triggers are met or at the City's discretion: 1) Identify project locations and feasibility of property or land acquisition, 2) Secure funds in the form of general funds, bonds, or grants, 3) Obtain City Council approval of Capital Improvement Project budget, 4) Initiate preliminary engineering to narrow project scope and demonstrate effectiveness and feasibility, 5) Hire design consultant to develop detailed construction plans and construction cost estimates, including land acquisition, if applicable, 6) Complete construction contractor bid and award process for construction phase, 7) Construct project, 8) Operation and maintenance into perpetuity.	Optional	Triggered as noted in Implementation Approach	On-going.		X						NA	Public Services and Engineering



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## JRMP Minimum BMPs by Component and Type

Minimum BMPs are implemented as needed and applicable at each site based on actual sources and activities to prevent and eliminate illicit discharges and pollutant deposition on impervious surfaces that are mobilized during rain events and end up in runoff. BMPs are applicable to construction, commercial, municipal and residential sources as noted in the following sections. Coronado relies on CASQA's BMP manuals for additional details and information on the implementation of BMPs as noted in the JRMP.

These BMPs are a supplement to the City of Coronado's Jurisdictional WQIP Strategies for San Diego Bay presented in Table I.5.1.

### Illicit Discharge Detection and Elimination

Section 3 of the City's JRMP includes the implementation strategies for the core permit compliance program and minimum BMPs for non-storm water sources to prevent and eliminate their illicit discharge. As noted in JRMP Table 3-2, the minimum BMPs are presented in Table I.5.2.

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**Table I.5.2  
 Summary of BMPs for City of Coronado – Non-Storm Water Discharges**

Non-storm Water Discharge Activities or Sources	Minimum BMPs (As Applicable to Site Conditions)	Potential Pollutants Addressed by BMP							
		Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Oil & Grease	Organics
Uncontaminated pumped ground water 1. If minimal and not permitted by the San Diego Water Board	<ul style="list-style-type: none"> <li>Direct to sanitary sewer, if practical (during construction only)</li> <li>Direct to landscaping or permeable area</li> </ul>	X	X				X		
Discharges from foundation drains 1. If minimal and not permitted by the San Diego Water Board 2. Applies only to systems designed and located at or below groundwater table 3. Extracting water during any part of the year, passively or actively 4. See below for additional category	<ul style="list-style-type: none"> <li>No new foundation drains allowed for new construction</li> <li>Temporary drains to sanitary sewer allowed during construction only</li> <li>Direct existing to sanitary sewer, if practical and approved by the City</li> <li>Direct existing to landscaping or permeable area, if practical</li> </ul>	X	X				X		
Water from crawl space pumps 1. If minimal and not permitted by the San Diego Water Board	<ul style="list-style-type: none"> <li>No new pumps allowed for new construction</li> <li>Temporary pumps to sanitary sewer allowed during construction only</li> <li>Direct existing to sanitary sewer, if practical and approved by the City</li> <li>Direct existing to landscaping or permeable area</li> </ul>	X	X	X			X		

**Table I.5.2**  
**Summary of BMPs for City of Coronado – Non-Storm Water Discharges (continued)**

Non-storm Water Discharge Activities or Sources	Minimum BMPs (As Applicable to Site Conditions)	Potential Pollutants Addressed by BMP							
		Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Oil & Grease	Organics
Water from footing drains 1. If minimal and not permitted by the San Diego Water Board 2. Applies only to systems designed and located at or below groundwater table 3. See below for additional category Extracting water during any part of the year, passively or actively	<ul style="list-style-type: none"> <li>No new drains allowed for new construction</li> <li>Temporary drains to sanitary sewer allowed during construction only</li> <li>Direct existing to sanitary sewer, if practical</li> <li>Direct existing to landscaping or permeable area</li> </ul>	X	X				X		
Water line flushing and water main breaks 1. If minimal and not permitted by the San Diego Water Board	<ul style="list-style-type: none"> <li>Coordinated with Public Services</li> <li>Re-used water</li> <li>Direct to pervious areas by using de-chlorinators</li> </ul>			X			X		
Diverted stream flows	Not present in Coronado								
Rising ground water	<ul style="list-style-type: none"> <li>Direct to sanitary sewer, if practical and approved by the City</li> <li>Direct to landscaping or pervious area</li> </ul>						X		
Uncontaminated ground water infiltration to MS4	<ul style="list-style-type: none"> <li>Identify sources/repair MS4</li> <li>Divert to permeable areas</li> <li>Divert to sanitary sewer and approve by the City</li> </ul>						X		
Springs	Not present in Coronado								
Flows from riparian habitats and wetlands	Not present in Coronado								

**Table I.5.2  
 Summary of BMPs for City of Coronado – Non-Storm Water Discharges (continued)**

Non-storm Water Discharge Activities or Sources	Minimum BMPs (As Applicable to Site Conditions)	Potential Pollutants Addressed by BMP							
		Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Oil & Grease	Organics
Potable water sources	<ul style="list-style-type: none"> <li>Coordinated with Public Services</li> <li>Re-used water (e.g., landscape irrigation)</li> <li>Direct to pervious areas by using de-chlorinators</li> </ul>						X		
Discharge from foundation drains 1. If system is designed to be located above the groundwater table at all times of the year 2. Applies only if system is only expected to discharge non-storm water under unusual circumstances 3. See above for additional category	<ul style="list-style-type: none"> <li>No new foundation drains allowed for new construction</li> <li>Temporary drains to sanitary sewer allowed during construction only</li> <li>Direct existing to sanitary sewer, if practical</li> <li>Direct existing to landscaping or permeable area, if practical</li> </ul>		X				X		
Discharge from footing drains 1. If system is designed to be located above the groundwater table at all times of the year 2. Applies only if system is only expected to discharge non-storm water under unusual circumstances 3. See above for additional category	<ul style="list-style-type: none"> <li>No new drains allowed for new construction</li> <li>Temporary drains to sanitary sewer allowed during construction only</li> <li>Direct existing to sanitary sewer, if practical</li> <li>Direct existing to landscaping or permeable area</li> </ul>		X				X		

**Table I.5.2  
 Summary of BMPs for City of Coronado – Non-Storm Water Discharges (continued)**

Non-storm Water Discharge Activities or Sources	Minimum BMPs (As Applicable to Site Conditions)	Potential Pollutants Addressed by BMP							
		Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Oil & Grease	Organics
Air conditioning condensation	<ul style="list-style-type: none"> <li>• Direct existing to landscaping or permeable area</li> <li>• Direct to sanitary sewer, if practical</li> <li>• Encourage shallow pan-condensate removal unit</li> <li>• Encourage shallow pan-evaporation</li> </ul>			X			X	X	
Individual residential vehicle washing (to the MS4)	<ul style="list-style-type: none"> <li>• Direct wash water to landscaped areas or permeable surfaces where feasible</li> <li>• Minimize water, washing detergent and vehicle cleaning/washing products</li> <li>• Promote and encourage practices or behaviors that prevent the discharge of pollutants</li> <li>• Vehicle washing in the City Right-of-Way is prohibited (by Ordinance)</li> <li>• Also see JRMP Section 3.5.5</li> </ul>			X		X	X	X	X
Dechlorinated swimming pool discharges	<ul style="list-style-type: none"> <li>• Prohibited by Ordinance</li> <li>• Discharge to sanitary sewer authorized only by Public Services</li> </ul>			X			X		

**Table I.5.2**  
**Summary of BMPs for City of Coronado – Non-Storm Water Discharges (continued)**

Non-storm Water Discharge Activities or Sources	Minimum BMPs (As Applicable to Site Conditions)	Potential Pollutants Addressed by BMP							
		Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Oil & Grease	Organics
Non-emergency firefighting discharge – building suppression maintenance	<ul style="list-style-type: none"> <li>Allowed to MS4 if no pollutants found through testing with Public Services oversight</li> <li>Direct to landscaping or permeable area</li> <li>Direct to sanitary sewer, if practical</li> <li>Also see JRMP Section 3.5.6</li> </ul>						X		X
Non-emergency firefighting discharge – firefighting (i.e., controlled or practices blazes, training, maintenance)	<ul style="list-style-type: none"> <li>Allowed to MS4 if no pollutants found through testing with Public Services oversight</li> <li>Direct to landscaping or permeable area</li> <li>Direct to sanitary sewer, if practical</li> <li>Also see JRMP Section 3.5.6</li> </ul>		X	X		X	X		
Emergency firefighting discharge	<ul style="list-style-type: none"> <li>Coordinated with Public Services</li> <li>Direct to sanitary sewer, if practical</li> <li>Direct to landscaping or permeable area</li> <li>Also see JRMP Section 3.5.6</li> </ul>		X			X	X		

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## **Construction Management**

Section 5 of the City’s JRMP includes the implementation of the core permit compliance program and minimum BMPs for non-storm water sources, provided in Table I.5.3, to prevent and eliminate their illicit discharge from construction sites. As noted in JRMP Section 5.5 and reproduced here, the minimum BMPs are listed by category.

The City has established guidance for each applicant’s project based on the pollutant threat category (high or medium) as specified in the JRMP’s Storm Water Standards Manual in Section 5 and describes the minimum BMPs to be evaluated for each project site. It is up to the project applicant, or the applicant’s engineer or contractor, to provide a construction BMP plan that considers and includes the applicable minimum BMP from the various groups (e.g., erosion control). The plan must be submitted to the City showing the location and type of BMPs appropriate for the site’s conditions, season, length of project, etc. The City will review the plan for completeness and for the appropriateness of the BMPs selected. The inspection program described in JRMP Section 5.6 is implemented by the City to verify the effectiveness of the submitted and approved construction BMP plan and BMPs, and to identify any required modifications. Construction BMPs generally target: sediment, bacteria, trash, dry weather flows, organics and oil and grease.

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**Table I.5.3  
 Summary of BMPs for City of Coronado – Construction**

Construction Activities or Sources	Minimum BMPs (As Applicable to Site Conditions) CASQA BMP in Parenthesis	Potential Pollutants Addressed by BMP							
		Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Oil & Grease	Organics
Project Planning	<ul style="list-style-type: none"> <li>Storm Water BMP Selection, Control Plan, Implementation</li> <li>Project Scheduling (EC-1)</li> </ul>	X			X	X	X	X	
Good Site Management “Housekeeping” and Waste Management	<ul style="list-style-type: none"> <li>Material Delivery and Storage (WM-1)</li> <li>Material Use (WM-2)</li> <li>Stockpile Management (WM-3)</li> <li>Spill Prevention and Control (WM-4)</li> <li>Solid Waste Management (WM-5)</li> <li>Concrete Waste Management (WM-8)</li> <li>Sanitary Waste Management (WM-9)</li> <li>Liquid Waste Management (WM-10)</li> </ul>	X	X	X	X	X	X	X	X
Non-Storm Water Management	<ul style="list-style-type: none"> <li>Water Conservation Practices (NS-1)</li> <li>Illegal Connection/Discharge (NS-6)</li> <li>Potable Water/Irrigation (NS-7)</li> <li>Vehicle and Equipment Cleaning, Fueling and Maintenance (NS-8, NS-9, NS-10)</li> <li>Concrete Curing and Finishing (NS-12, NS-13)</li> </ul>	X	X	X	X	X	X	X	X

**Table I.5.3  
 Summary of BMPs for City of Coronado – Construction (continued)**

Construction Activities or Sources	Minimum BMPs (As Applicable to Site Conditions) CASQA BMP in Parenthesis	Potential Pollutants Addressed by BMP							
		Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Oil & Grease	Organics
Erosion Control	<ul style="list-style-type: none"> <li>• Preservation of Existing Vegetation (EC-2)</li> <li>• Wind Erosion Control (WE-1)</li> </ul> One or more of the following as applicable and practical: EC-3, EC-4, EC-5, EC-6, EC-7, EC-8, EC-14, EC-15, EC-16				X	X			
Sediment Control	<ul style="list-style-type: none"> <li>• Street Sweeping and Vacuuming (SE-7)</li> <li>• Storm Drain Inlet Protection (SE-9)</li> <li>• At minimum one perimeter control from: CASQA SE-1, SE-4, SE-5, SE-6, SE-8, SE-13 or SE-14</li> </ul>				X	X			

## Existing Development

Municipal Existing Development is included in JRMP Section 6.5.4 and outlines the minimum BMPs considered for facilities, areas, and activities. In the category of pollution prevention they include:

1. Good Housekeeping
2. Non-storm Water Discharge Prohibitions (per JRMP Sections 3.3 through 3.5)
  - a. Storm drain marking and placards
  - b. Routine maintenance of storage area
3. Employee Training, Knowledge
4. Spill Prevention, Control and Clean-up
  - a. Proper containment, cover
  - b. Storage, and disposal of solid/liquid/fluid spill
  - c. Effective recycling/reuse
5. Safe Alternative Product Purchase and Use

The specific BMPs selected for each facility or operation are provided in the JRMP Existing Development inventory in the City's Storm Water Standards Manual, Section 6. BMPs in these categories address a variety of pollutants depending on the activities conducted and sources at the facility/area. Generally BMPs target: trash, bacteria, metals, sediment, dry weather flow, nutrients, oil and grease, and organics.

Other municipal and commercial categories and BMPs are addressed depending on the operations on-site are and may include the elements presented in Table I.5.4. Additional municipal operations BMPs are presented in Table I.5.5.

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**Table 1.5.4  
 Summary of BMPs for City of Coronado – Existing Development (Commercial and Municipal)**

Existing Development Commercial and Municipal Source and Activities	Minimum BMPs (As Applicable to Site Conditions) CASQA BMP in Parentheses	Potential Pollutants Addressed by BMP							
		Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Oil & Grease	Organics
Vehicle and Equipment Fueling, Cleaning and Repair	<ul style="list-style-type: none"> <li>• Proper disposal of solid/liquid/fluid spill</li> <li>• Proper drainage of fluids</li> <li>• Dry methods and mechanical cleaning (self-contained)</li> <li>• Proper collection and disposal of water</li> <li>• Proper handling of material and waste</li> </ul> (BMP Fact Sheets: SC-20, SC-21, SC-22)			X		X		X	X
Materials and Waste Management	<ul style="list-style-type: none"> <li>• Outdoor loading/unloading (SC-30)</li> <li>• Outdoor container storage (SC-31)</li> <li>• Outdoor equipment operations (SC-32)</li> <li>• Outdoor storage raw materials (SC-33)</li> <li>• Waste handling and disposal (SC-34)</li> </ul>	X	X	X	X		X	X	X

**Table I.5.4  
 Summary of BMPs for City of Coronado –Existing Development (Commercial and Municipal) (continued)**

Existing Development Commercial and Municipal Source and Activities	Minimum BMPs (As Applicable to Site Conditions) CASQA BMP in Parentheses	Potential Pollutants Addressed by BMP							
		Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Oil & Grease	Organics
Building and Grounds Maintenance	<ul style="list-style-type: none"> <li>• Building, grounds maintenance (SC-41)</li> <li>• Building repair and construction (SC-42)</li> <li>• Parking/storage area maintenance (SC-43)</li> <li>• Drainage system maintenance (SC-44)</li> <li>• Contained pressure washing</li> <li>• Proper waste disposal-repair, remodeling, and construction (see Construction Waste Management)</li> <li>• Proper landscaping practices (SC-73)</li> <li>• Proper maintenance of catch basins/inlets (SC-74)</li> <li>• Routine inspections for illicit connection/discharge, dumping</li> </ul>	X	X	X	X	X	X	X	X
Pesticides, Herbicides, and Fertilizers	<ul style="list-style-type: none"> <li>• Non-Stormwater Discharges (SC-10)</li> <li>• Spill Prevention Control and Cleanup (SC-11)</li> <li>• Outdoor Loading/Unloading (SC-30)</li> <li>• Outdoor Container Storage (SC-31)</li> <li>• Outdoor Storage Raw Materials (SC-33)</li> <li>• Waste Handling &amp; Disposal (SC-34)</li> <li>• Safer Alternative Products (SC-35)</li> <li>• Housekeeping Practices (SC-60)</li> <li>• Landscape Maintenance (SC-73)</li> </ul>	X	X		X	X			X

**Table I.5.5  
 Summary of BMPs for City of Coronado – Existing Development (Municipal)**

Existing Development Municipal	Additional Potential Minimum BMPs (As Applicable to Site Conditions)	Potential Pollutants Addressed by BMP							
		Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Oil & Grease	Organics
Municipal Field Operations	<ul style="list-style-type: none"> <li>• Road and street maintenance (SC-70)</li> <li>• Plaza and sidewalk maintenance (SC-71)</li> <li>• Fountains and pools maintenance (SC-72)</li> <li>• Landscape maintenance (SC-73)</li> <li>• Drainage system maintenance (SC-74)</li> <li>• Waste handling and disposal (SC-75)</li> <li>• Water and sewer utility maintenance (SC-76)</li> </ul>	X	X	X	X	X	X	X	X
MS4 Operation and Maintenance	<ul style="list-style-type: none"> <li>• Inspections of the MS4 and related structures</li> <li>• Cleaning of the MS4 and related structures</li> <li>• Proper disposal of materials removed from cleaning of the MS4 and related structures</li> </ul>	X	X	X	X	X	X	X	
Sanitary Sewer System Operation and Maintenance	<ul style="list-style-type: none"> <li>• Prevention and capture of sanitary sewer spills</li> <li>• Effective operation for use of the runoff diverters</li> <li>• Prevention of infiltration of sanitary sewage into the MS4</li> <li>• Prevention and management of sanitary sewer leaks or other failures</li> </ul>	X	X	X			X	X	X

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## **Special Events**

The City's JRMP describes Special Event requirements and procedures in Section 6.5.9.1 and detailed BMPs in the Storm Water Standards Manual are provided in Section 6-B. In summary, all major and most moderate events are subject to a planning meeting between City department representatives and organizers to establish all requirements and conditions for the event. The City holds event organizers strictly responsible for compliance event requirements and conditions. Storm water BMPs and other controls are included in the planning stage and meetings. The BMPs that address existing development for special events are provided in Table I.5.6.

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**Table 1.5.6  
 Summary of BMPs for City of Coronado – Existing Development (Special Events)**

Existing Development Special Events	Potential Minimum BMPs	Potential Pollutants Addressed by BMP							
		Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Oil & Grease	Organics
Inlet and catch basin protection	<ul style="list-style-type: none"> <li>• Temporary screens</li> <li>• Alternatively, inspect and clean as needed</li> </ul>				X	X			
Waste management	<ul style="list-style-type: none"> <li>• Trash and litter removal, recyclables containers</li> <li>• Event area cleaning</li> <li>• Trash receptacles, inspected and replaced or emptied as needed</li> <li>• No smoking ban (no cigarette butts)</li> <li>• Pet restrictions (no pet waste)</li> <li>• Portable toilet management</li> <li>• Decorations and other party favors (e.g., confetti) are restricted or limited to specified, approved areas. Must be cleaned.</li> </ul>	X	X	X	X		X	X	X
Street and parking lot sweeping	<ul style="list-style-type: none"> <li>• Immediately following major and moderate events</li> <li>• No vehicles allowed on sand or turf (no tracking to City streets, parking lots).</li> </ul>				X				

Existing Development Special Events	Potential Minimum BMPs	Potential Pollutants Addressed by BMP							
		Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Oil & Grease	Organics
Washing and cleaning operations	<ul style="list-style-type: none"> <li>Washing and cleaning of equipment is allowed only with approval by the City.</li> <li>Restricted areas and conditions, including impervious areas must be used.</li> <li>No discharge to MS4 or right-of-way allowed.</li> <li>Limited to certain facilities.</li> </ul>	X	X		X		X	X	

## **Residential Development**

For residential areas, the implementation of BMPs is linked to the City’s Public Education and Outreach Program (JRMP Section 7). City staff evaluated all residential activities that have the potential to occur within the City of Coronado and determined that activities for which BMPs will be promoted and will be the focus of residential education and inspections are presented in Table I.5.7.

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**Table I.5.7  
 Summary of BMPs for City of Coronado – Existing Development (Residential)**

Residential Existing Development	Potential Minimum BMPs	Potential Pollutants Addressed by BMP							
		Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Oil & Grease	Organics
Good Housekeeping	<ul style="list-style-type: none"> <li>Spill prevention, control and clean-up</li> <li>Proper containment, cover</li> <li>Storage, and disposal of solid/liquid/fluid spill</li> <li>Effective recycling/reuse</li> <li>Safe Alternative Product Purchase and Use</li> </ul>	X	X	X	X		X	X	X
Non-storm Water Discharge Prohibitions and Prevention	<ul style="list-style-type: none"> <li>See above in general category</li> <li>JRMP Sections 3.3 through 3.5</li> </ul>	X	X	X		X	X	X	X
Erodible or disturbed soils	<ul style="list-style-type: none"> <li>Maintain proper ground cover</li> <li>Minimize disturbed soils and exposure time during projects</li> </ul>	X				X	X		
Storage of materials and waste disposal	<ul style="list-style-type: none"> <li>Proper disposal of trash</li> <li>Proper disposal of pet waste</li> <li>Proper disposal of green waste</li> <li>Proper discharge of pool/spa water</li> </ul>	X	X	X	X	X	X	X	

**Table I.5.7**  
**Summary of BMPs for City of Coronado – Existing Development (Residential) (continued)**

Residential Existing Development	Potential Minimum BMPs	Potential Pollutants Addressed by BMP							
		Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Oil & Grease	Organics
Home and garden care activities and product use	<ul style="list-style-type: none"> <li>• Proper management and disposal of pesticides, herbicides, and fertilizers;</li> <li>• Proper use and disposal of cleaners and chemicals</li> <li>• Home repair and remodeling (by homeowner)</li> <li>• Surface cleaning or power washing</li> </ul>	X	X	X	X	X	X	X	X
Household hazardous waste	<ul style="list-style-type: none"> <li>• Proper disposal of household hazardous waste at City facility, services</li> </ul>		X	X				X	X
Vehicle, boat and equipment repair and maintenance, washing, and parking	<ul style="list-style-type: none"> <li>• Proper disposal of solid/liquid/fluid spill</li> <li>• Proper drainage of fluids</li> <li>• Dry methods and mechanical cleaning (self-contained)</li> <li>• Proper collection and disposal of water</li> <li>• Proper handling of material and waste</li> </ul>	X	X	X	X	X	X	X	X
Sanitary sewer spills, blockages	<ul style="list-style-type: none"> <li>• Maintenance and proper condition of private property sewer laterals</li> </ul>	X	X	X			X	X	X

## **I.6 COUNTY OF SAN DIEGO STRATEGIES**

The County of San Diego's (County's) jurisdictional strategies, found in Table I.6.1, and optional strategies, found in Table I.6.2, were chosen because they best suit the characteristics of its jurisdiction within the Chollas Creek HA. Potential dry weather flows are evaluated through inspection of MS4 outfalls and education and outreach. To treat potential runoff from County facilities, retrofit projects utilizing LID approaches in conjunction with drainage and parking improvements were completed at the Southeast Family Resource Center and Central Regional Public Health Center. The Minimum Best Management Practices utilized by the County are provided in Table I.6.3. In Chollas Creek, a compliance analysis using a watershed model was conducted to identify the strategies required to be implemented to meet final goals. The strategies and implementation schedules identified provide that numeric goals are met. The adaptive management process provides the framework to evaluate progress toward meeting the goals and allows for modification of strategies. As strategies are modified, the compliance analysis is updated as needed to provide assurance that numeric goals are met.

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**Table I.6.1 County of San Diego  
 Jurisdictional Strategies**

ID	Strategy	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Frequency of Inspections (B.3.b.(1)(a)(iv)) or Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed										Physical and Biological Benefits		Source  (B.3.b(1)(a)(i))	Collaborating Agencies  (B.3.b.(1)(c))
				Bacteria <sup>1</sup>	Metals	Organics	Sediment	Pesticides	Nutrients	Oil & Grease	Dissolved Minerals	Trash	Flow	Habitat/Wildlife			
<b>JRMP (E.2 – E.7) Strategies (E.3.b.(1)(a))</b>																	
<b>E.3 Development Planning</b>																	
CoSD-1	Require implementation of source control and Low Impact Development (LID) BMPs for all development projects.	Current	Ongoing	X	X	X	X	X	X	X	X	X	X	X	X	Development (Including Residential, Commercial, Industrial, and Municipal Areas)	
CoSD-2	Update BMP Design Manual procedures to specify stormwater requirements applicable to development and redevelopment projects, identify and design appropriate BMPs, establish maintenance criteria, and establish where implemented alternative compliance options.	FY16	In development	X	X	X	X	X	X	X	X	X	X	X	X	Development (Including Residential, Commercial, Industrial, and Municipal Areas)	All Copermittees
CoSD-3	<i>Conduct internal (staff) training on the updated BMP Manual</i>	FY16	One time	X	X	X	X	X	X	X	X	X			Development (Including Residential, Commercial, Industrial, and Municipal Areas)		
CoSD-4	<i>Hold external land development workshops targeting the development community</i>	FY16	One time	X	X	X	X	X	X	X	X	X			Development (Including Residential, Commercial, Industrial, and Municipal Areas)	All Copermittees	
CoSD-5	Implement a program that ensures that all structural BMPs are designed, constructed and maintained on Priority Development and Redevelopment Projects.	Current	Continuous	X	X	X	X	X	X	X	X	X	X	X	Development (Including Residential, Commercial, Industrial, and Municipal Areas)		

**Table I.6.1 County of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Frequency of Inspections (B.3.b.(1)(a)(iv)) or Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed										Physical and Biological Benefits		Source (B.3.b(1)(a)(i))	Collaborating Agencies (B.3.b.(1)(c))
				Bacteria <sup>1</sup>	Metals	Organics	Sediment	Pesticides	Nutrients	Oil & Grease	Dissolved Minerals	Trash	Flow	Habitat/Wildlife			
CoSD-7	Impose legal authority to require all development and redevelopment projects are in compliance with all post construction requirements.	Current	Continuous	X	X	X	X	X	X	X	X	X	X	X	X	Development (Including Residential, Commercial, Industrial, and Municipal Areas)	
CoSD-8	<i>Update County codes, ordinances, and stormwater design standards consistent with the permit and the updated BMP Manual</i>	FY15	One time	X	X	X	X	X	X	X	X	X				Development (Including Residential, Commercial, Industrial, and Municipal Areas)	
CoSD-9	Priority Development Projects: In addition to requirement for all development projects, implement or require implementation of onsite structural BMPs to control pollutants and manage hydromodification for PDPs.	Current	Continuous	X	X	X	X	X	X	X	X	X	X	X	X	Development (Including Residential, Commercial, Industrial, and Municipal Areas)	
<b>E.4 Construction Management</b>																	
CoSD-10	Maintain, update and prioritize a watershed based inventory of all projects issued local permits that allow soil disturbing activities.	FY16	quarterly	X	X	X	X	X	X	X	X	X	X	X	X	Construction (Including Residential, Commercial, Industrial, and Municipal Areas)	
CoSD-11	Require implementation of BMPs that are site specific, seasonally appropriate and appropriate to the construction phase, year round.	FY16	Per JRMP Tables 4.2, 4.3, 4.4, 4.5 & 4.6				X			X		X	X	X	X	Construction (Including Residential, Commercial, Industrial, and Municipal Areas)	
CoSD-12	Impose legal authority to require inventoried construction projects are in compliance with all requirements.	Current	As Needed	X	X	X	X	X	X	X	X	X	X	X	X	Construction (Including Residential, Commercial, Industrial, and Municipal Areas)	

**Table I.6.1 County of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Frequency of Inspections (B.3.b.(1)(a)(iv)) or Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed										Physical and Biological Benefits		Source (B.3.b(1)(a)(i))	Collaborating Agencies (B.3.b.(1)(c))
				Bacteria <sup>1</sup>	Metals	Organics	Sediment	Pesticides	Nutrients	Oil & Grease	Dissolved Minerals	Trash	Flow	Habitat/Wildlife			
CoSD-13	<i>Make updates to County ordinances related to construction; reference to existing grading ordinance</i>	Current	As Needed	X	X	X	X	X	X	X	X	X	X	X	Construction (Including Residential, Commercial, Industrial, and Municipal Areas)		
CoSD-14	Provide internal staff training related to construction storm water management.	Ongoing	Annually	X	X	X	X	X	X	X	X	X			Construction (Including Residential, Commercial, Industrial, and Municipal Areas)		
<b>E.5 Existing Development</b>																	
<b>Commercial, Industrial, Municipal, and Residential Facilities and Areas</b>																	
CoSD-15	Maintain and update a watershed-based inventory of existing development (i.e. commercial, industrial, municipal and residential areas).	Current	Annually	X	X	X	X	X	X	X	X	X	X		Residential, Commercial, Industrial, and Municipal Areas		
CoSD-16	<i>Improve the tracking of watershed based inventories via consolidated database</i>	FY16	Continuous	X	X	X	X	X	X	X	X	X	X		Residential, Commercial, Industrial, and Municipal Areas		

**Table I.6.1 County of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Frequency of Inspections (B.3.b.(1)(a)(iv)) or Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed										Physical and Biological Benefits		Source (B.3.b(1)(a)(i))	Collaborating Agencies (B.3.b.(1)(c))
				Bacteria <sup>1</sup>	Metals	Organics	Sediment	Pesticides	Nutrients	Oil & Grease	Dissolved Minerals	Trash	Flow	Habitat/Wildlife			
CoSD-17	Designate a minimum set of BMPs required for all existing development inventories, including special event venues. The designated minimum BMPs must be specific to facility or area types and pollutant generating activities, as appropriate.	Current	As needed, minimum of once per permit cycle	X	X	X	X	X	X	X	X	X	X	X	Residential, Commercial, Industrial, and Municipal Areas		
CoSD-18	<i>Create an Equestrian BMP Handbook</i>	FY16	One time	X	X	X	X	X	X	X	X	X	X		Animal Facilities	Copermittees	
CoSD-19	Require implementation of minimum BMPs for existing development (commercial, industrial, municipal, and residential) that are specific to the facility, area types and pollutant generating activities, as appropriate.	Current	Continuous	X	X	X	X	X	X	X	X	X	X	Residential, Commercial, Industrial, and Municipal Areas			
CoSD-20	<i>Pet waste management and outreach in County Parks.</i>	Current	Continuous	X		X	X		X			X		Residential Areas			
CoSD-21	Promote and encourage implementation of designated BMPs in residential areas.	FY16	Continuous	X	X	X	X	X	X	X	X	X	X	Residential Areas			

**Table I.6.1 County of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Frequency of Inspections (B.3.b.(1)(a)(iv)) or Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed										Physical and Biological Benefits		Source (B.3.b(1)(a)(i))	Collaborating Agencies (B.3.b.(1)(c))
				Bacteria <sup>1</sup>	Metals	Organics	Sediment	Pesticides	Nutrients	Oil & Grease	Dissolved Minerals	Trash	Flow	Habitat/Wildlife			
CoSD-22	Conduct inspections of inventoried existing development to ensure compliance	FY16	20% per year, all within 5 years	X	X	X	X	X	X	X	X	X			Residential, Commercial, Industrial, and Municipal Areas		
CoSD-23	<i>Conduct focused residential inspections based on strategic assessments.</i>	FY16	20% per year, all within 5 years	X	X	X	X	X	X	X	X	X			Residential Areas		
CoSD-24	<i>Develop a residential inspections tracking program via mobile platform - miles, violations, etc.</i>	FY16	ongoing with inspections	X	X	X	X	X	X	X	X	X			Residential Areas		
CoSD-25	<i>Improve inspections data tracking through mobile phone applications</i>	FY16	Continuous	X	X	X	X	X	X	X	X	X			Residential Areas		
CoSD-26	Enforce legal authority established for all inventoried existing development to achieve compliance	Current	Continuous	X	X	X	X	X	X	X	X	X			Residential, Commercial, Industrial, and Municipal Areas		
CoSD-27	<i>Update county ordinance related to existing development; reference to existing guidance documents</i>	Current	Once per Permit Cycle.	X	X	X	X	X	X	X	X	X	X	X	Residential, Commercial, Industrial, and Municipal Areas		
<b>MS4 Infrastructure</b>																	
CoSD-28	Implement a schedule or operation and maintenance activities for the stormwater conveyance system and related structures.	Current	Per JRMP (Table 5.3 - 5)	X	X		X		X					X	Municipal		
<b>Roads, Streets, and Parking Lots</b>																	

**Table I.6.1 County of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Frequency of Inspections (B.3.b.(1)(a)(iv)) or Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed										Physical and Biological Benefits		Source (B.3.b(1)(a)(i))	Collaborating Agencies (B.3.b.(1)(c))	
				Bacteria <sup>1</sup>	Metals	Organics	Sediment	Pesticides	Nutrients	Oil & Grease	Dissolved Minerals	Trash	Flow	Habitat/Wildlife				
CoSD-29	Implement a schedule of operation and maintenance for County paved and unpaved roads.	Current	Per JRMP (Table 5.3-3)	X	X	X	X		X		X	X		X		Roads, Streets, Freeways		
<b>Pesticides, Herbicides, and Fertilizer BMP Program</b>																		
CoSD-30	Require implementation of BMPs to address application, storage, and disposal of pesticides, herbicides, and fertilizers on commercial, industrial, and municipal properties. Includes education, permits, and certifications.	Current	Ongoing			X		X	X						X	Residential Areas, Nurseries and Greenhouses		
<b>Retrofit and Rehabilitation in Areas of Existing Development</b>																		
CoSD-31	Promote incentive program for BMP retrofits (e.g. water smart irrigation controllers, turf replacements programs, residential landscape evaluation program).	FY16	Continuous	X	X		X		X					X		Residential Areas	Copermittees; NGOs; Water Agencies	
CoSD-32	Collaborate with partner agencies and groups to promote non-County sponsored incentive programs for BMP retrofits, including rain barrels, smart controllers, soil sensors, turf replacement, etc.	Current	Continuous	X	X	X	X	X	X	X	X	X	X	X		Residential Areas	Copermittees; NGOs; Water Agencies	
CoSD-33	Identify candidate areas of existing development for stream, channel, and/or habitat rehabilitation projects and facilitate implementation of such projects.	Current	Continuous	X	X		X		X					X		Residential Areas	Copermittees	
<b>E.2 Illicit Discharge, Detection, and Elimination (IDDE) Program</b>																		

**Table I.6.1 County of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Frequency of Inspections (B.3.b.(1)(a)(iv)) or Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed										Physical and Biological Benefits		Source (B.3.b(1)(a)(i))	Collaborating Agencies (B.3.b.(1)(c))
				Bacteria <sup>1</sup>	Metals	Organics	Sediment	Pesticides	Nutrients	Oil & Grease	Dissolved Minerals	Trash	Flow	Habitat/Wildlife			
CoSD-34	Maintain stormwater conveyance system map to facilitate IDDE program	Current	Annually	X	X	X	X	X	X	X	X	X			Residential, Commercial, Industrial, and Municipal Areas; Sewage Infrastructure and Activities; Roads, Streets, Freeways		
CoSD-35	Utilize municipal personnel and contractors to identify and report Illicit Connections and Discharges	Current	Continuous	X	X	X	X	X	X	X	X	X			Residential, Commercial, Industrial, and Municipal Areas; Sewage Infrastructure and Activities; Roads, Streets, Freeways	Contractor	
CoSD-36	<i>Updated focused training for County field staff</i>	FY16	Annually	X	X	X	X	X	X	X	X	X			Residential, Commercial, Industrial, and Municipal Areas; Sewage Infrastructure and Activities; Roads, Streets, Freeways		
CoSD-37	Collect effluent on the ground (EOG), sanitary sewer overflow (SSO) data	Current	Continuous	X	X	X	X	X	X	X	X	X	X	X	Sewage Infrastructure and Activities, Septic Tanks		
CoSD-38	<i>Address septic system failures where observed</i>	Current	As Needed	X	X	X	X	X	X	X	X	X	X	X	Sewage Infrastructure and Activities, Septic Tanks		
CoSD-39	Facilitate public reporting of ICID via telephone and email	Current	Continuous	X	X	X	X	X	X	X	X	X			Residential, Commercial, Industrial, and Municipal Areas; Sewage Infrastructure and Activities; Roads, Streets, Freeways		
CoSD-40	<i>Refer homeless issue complaints to Sheriff or appropriate jurisdictions</i>	Current	Continuous	X					X			X		X	Homeless Encampments		

**Table I.6.1 County of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Frequency of Inspections (B.3.b.(1)(a)(iv)) or Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed										Physical and Biological Benefits		Source (B.3.b(1)(a)(i))	Collaborating Agencies (B.3.b.(1)(c))
				Bacteria <sup>1</sup>	Metals	Organics	Sediment	Pesticides	Nutrients	Oil & Grease	Dissolved Minerals	Trash	Flow	Habitat/Wildlife			
CoSD-41	<i>Bilingual hotline answered by a live operator (I Love a Clean San Diego) to provide better customer service</i>	FY16	Ongoing	X	X	X	X	X	X	X	X	X			Residential, Commercial, Industrial, and Municipal Areas; Sewage Infrastructure and Activities; Roads, Streets, Freeways	All Copermitees	
CoSD-42	Implement practices and procedures to address spills with the potential to enter the storm drain system	Current	Continuous	X	X	X	X	X	X	X	X	X			Sewage Infrastructure and Activities, Septic Tanks		
CoSD-43	<i>Coordinate spill response with responsible sewer agencies</i>	FY16	Continuous	X	X	X	X	X	X	X	X	X			Sewage Infrastructure and Activities, Septic Tanks	RMWD	
CoSD-44	Implement practices and procedures to prevent/limit infiltration of seepage from sanitary sewers	Current	Continuous	X			X	X	X					X	Sewage Infrastructure and Activities, Septic Tanks	RMWD	
CoSD-45	Coordinate with upstream entities to prevent illicit discharges from upstream sources entering into the storm drain system	Current	Continuous	X	X	X	X	X	X	X	X	X		X	Residential, Commercial, Industrial, and Municipal Areas; Sewage Infrastructure and Activities; Roads, Streets, Freeways	Upstream Agencies	
CoSD-46	Utilize municipal personnel and Contractors to monitor stormwater outfalls for discharges of potential ICIDs	Current	Annually	X	X	X	X	X	X	X	X	X			Residential, Commercial, Industrial, and Municipal Areas; Sewage Infrastructure and Activities; Roads, Streets, Freeways	Contractors	
CoSD-47	Develop and implement a strategy for investigating and addressing ICIDs.	FY15	One time	X	X	X	X	X	X	X	X	X			Residential, Commercial, Industrial, and Municipal Areas; Sewage Infrastructure and Activities; Roads, Streets, Freeways		

**Table I.6.1 County of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Frequency of Inspections (B.3.b.(1)(a)(iv)) or Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed										Physical and Biological Benefits		Source (B.3.b(1)(a)(i))	Collaborating Agencies (B.3.b.(1)(c))	
				Bacteria <sup>1</sup>	Metals	Organics	Sediment	Pesticides	Nutrients	Oil & Grease	Dissolved Minerals	Trash	Flow	Habitat/Wildlife				
<b>E.7 Public Education and Participation (B.3.b.(1)(a)(iii))</b>																		
CoSD-48	Implement a public education and participation program to promote and encourage development of programs, management practices and behaviors that reduce the discharge of pollutants in storm water prioritized by high risk behaviors, pollutants of concern, and target audiences.	Current	Continuous	X	X	X	X	X	X	X	X	X					Varies	
CoSD-49	<i>Develop, improve, and distribute outreach materials.</i>	Current	Continuous	X	X	X	X	X	X	X	X	X					Varies	
CoSD-50	<i>Give outreach presentations to elementary, middle, and high school students</i>	Current	Continuous	X	X	X	X	X	X	X	X	X					Varies	
CoSD-53	<i>Outreach to mobile landscaping service providers</i>	Current	Continuous	X	X	X	X	X	X	X	X	X					Mobile Landscaping <sup>2</sup>	
CoSD-54	<i>Conduct Homeowners Associations Outreach and Coordination Pilot Study</i>	FY16	Continuous	X	X	X	X	X	X	X	X	X	X	X			Residential Areas	
CoSD-55	<i>Expand Homeowners Associations Outreach and Coordination based on the pilot project within San Luis Rey, San Dieguito, or San Diego River as needed and as funding is identified</i>	FY17	Continuous	X	X	X	X	X	X	X	X	X	X	X			Residential and Commercial Areas, Over-irrigation	

**Table I.6.1 County of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Frequency of Inspections (B.3.b.(1)(a)(iv)) or Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed										Physical and Biological Benefits		Source (B.3.b(1)(a)(i))	Collaborating Agencies (B.3.b.(1)(c))
				Bacteria <sup>1</sup>	Metals	Organics	Sediment	Pesticides	Nutrients	Oil & Grease	Dissolved Minerals	Trash	Flow	Habitat/Wildlife			
CoSD-56	Collaborate with watershed partners to develop consistent messaging to targeted audiences such as commercial, and residents to conserve water and reduce dry weather flows	FY17	Continuous	X	X	X	X	X	X	X	X	X	X	X	Residential and Commercial Areas	County Water Authority; Copermittees; NGOS	
CoSD-57	<i>Sponsor Trash Collection Events through public outreach and participation</i>	FY16	Continuous	X	X	X		X		X		X		X	Residential Areas, Animal facilities, Nurseries and Greenhouses	NGOs	
CoSD-58	<i>Educational Workshops on Integrated Pest Management, manure management and others as needed</i>	Current	Continuous	X			X		X					X	Residential Areas, Animal facilities, Nurseries and Greenhouses		
CoSD-59	Partner with Master Gardeners Programs to provide education opportunities on water use and practices for gardening	Current	As Needed	X	X	X	X	X	X	X	X	X	X	X	Varies	County Master Gardener Program	
CoSD-60	<i>Conduct Effectiveness Survey's on Education &amp; Outreach programs</i>	Current	Annually	X			X		X					X	Varies		
<b>E.6 Enforcement Response Plan</b>																	
CoSD-61	Implement escalating enforcement responses to compel compliance with statutes, ordinances, permits, contracts, orders, and other requirements for IDDE, development planning, construction management, and existing development in the Enforcement Response Plan.	Current	Continuous	X	X	X	X	X	X	X	X	X			Residential, Commercial, Industrial, and Municipal Areas		

**Table I.6.1 County of San Diego  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Frequency of Inspections (B.3.b.(1)(a)(iv)) or Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed										Physical and Biological Benefits		Source (B.3.b(1)(a)(i))	Collaborating Agencies (B.3.b.(1)(c))
				Bacteria <sup>1</sup>	Metals	Organics	Sediment	Pesticides	Nutrients	Oil & Grease	Dissolved Minerals	Trash	Flow	Habitat/Wildlife			
CoSD-62	Notify the SDWB by email (Nonfilers_R9waterboards.ca.gov) within five (5) calendar days of issuing escalated enforcement to a construction site that poses a significant threat to water quality as a result of violations or other noncompliance	FY16	Continuous	X	X	X	X	X	X	X	X	X			Construction (Including Residential, Commercial, Industrial, and Municipal Areas)		
CoSD-63	Notify the SDWB by email (Nonfilers_R9waterboards.ca.gov) any persons required to obtain coverage under the statewide Industrial General Permit and Construction General Permit and failing to do so, within five (5) calendar days from the time the Copermittee become aware of the circumstances.	FY16	Continuous	X	X	X	X	X	X	X	X	X			Construction (Including Residential, Commercial, Industrial, and Municipal Areas), Industrial Areas		

Note:  
 1. Orange-shaded cell indicates highest priority water quality condition for the San Diego Bay WMA.

**Table I.6.2 County of San Diego  
 Optional Strategies**

ID	Strategy	Triggers (B.3.b.(1)(b)(v))	Funds/Resources, (B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementatio n Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed										Physical and Biological Benefits		Source <sup>2</sup> (B.3.b(1)(a)(i))	Collaborating Agencies (B.3.b.(1)(c))
						Bacteria <sup>1</sup>	Metals	Organics	Sediment	Pesticides	Nutrients	Oil & Grease	Dissolved Minerals	Trash	Flow	Habitat/Wildlife			
<b>Non-JRMP Strategies (Optional Strategies, B.3.b.(1)(b))</b>																			
<b>Non-Structural Strategies</b>																			
<b>Provision B.3.b.(1)(b)(i) - BMPs, incentives, or programs that may be implemented that are in addition to requirements of Provision B.3.b.(1)(a)</b>																			
CoSD-Opt1	Implement Sustainable Landscapes Program to encourage landscape retrofits.	Implementation of this strategy may be triggered if (1) it has been determined by the County of San Diego through adaptive management that implementation is necessary; and (2) all of the necessary resources have been secured. Continue implementation when the funding and incentives items are secured.	<ul style="list-style-type: none"> <li>• Staff resources</li> <li>• Grant funding items</li> <li>• Incentive items</li> <li>• Partnerships</li> </ul>	FY 2016-17	Continuous until grant funding and incentives are depleted	X	X	X	X	X	X		X		X	X	Residential and Commercial Areas, Nurseries and Greenhouses	NGOs, Copermittees, other Agencies	

**Table I.6.2 County of San Diego  
 Optional Strategies (continued)**

ID	Strategy	Triggers (B.3.b.(1)(b)(v))	Funds/Resources, (B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementatio n Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed										Physical and Biological Benefits		Source <sup>2</sup> (B.3.b(1)(a)(i))	Collaborating Agencies (B.3.b.(1)(c))
						Bacteria <sup>1</sup>	Metals	Organics	Sediment	Pesticides	Nutrients	Oil & Grease	Dissolved Minerals	Trash	Flow	Habitat/Wildlife			
CoSD-Opt2	Implement an incentive program for BMP Retrofits (Public-Private Partnerships - a County sponsored program to offer incentives for rain barrel installation, downspout disconnects from the stormwater system, etc.)	Implementation of this strategy may be triggered if (1) an interim goal has not been met; and (2) it has been determined by the County of San Diego through adaptive management that implementation is necessary; and (3) pilot program success; and (4) all of the necessary resources have been secured.	<ul style="list-style-type: none"> <li>• Staff resources</li> <li>• Grant funding or alternative source</li> <li>• Incentive items</li> <li>• Partnerships</li> </ul>	FY 2015-16	Continuous, as resources allow	X	X	X	X	X	X	X	X	X	X	X	Residential and Commercial Areas	Water Agencies, NGOs, Copermittees	

**Table I.6.2 County of San Diego  
 Optional Strategies (continued)**

ID	Strategy	Triggers (B.3.b.(1)(b)(v))	Funds/Resources, (B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementatio n Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed										Physical and Biological Benefits		Source <sup>2</sup> (B.3.b(1)(a)(i))	Collaborating Agencies (B.3.b.(1)(c))
						Bacteria <sup>1</sup>	Metals	Organics	Sediment	Pesticides	Nutrients	Oil & Grease	Dissolved Minerals	Trash	Flow	Habitat/Wildlife			
CoSD-Opt3	Implement a program that provides rebates or incentives for pumping septic systems, with a focus in high risk areas adjacent to waterways (within 600 feet).	Implementation of this strategy may be triggered if (1) an interim goal has not been met; and (2) it has been determined by the County of San Diego through adaptive management that implementation is necessary; and (3) pilot program success; and (4) all of the necessary resources have been secured.	<ul style="list-style-type: none"> <li>• Staff resources</li> <li>• Grant funding or alternative source</li> <li>• Contractor funding</li> <li>• Partnerships</li> <li>• Incentive items</li> </ul>	Once triggered	Once triggered, Pilot program 1 -2 years, as needed there after	X	X	X	X	X	X	X	X	X			Sewage Infrastructure and Activities, Septic Tanks	Sewer Districts	
CoSD-Opt4	Identify where sewer and stormwater infrastructure are in close proximity and subsequently, confirm the absence of flow at nearby stormwater MS4 outfall during dry weather.	Implementation of this strategy may be triggered if (1) an interim goal has not been met; and (2) it has been determined by the County of San Diego through adaptive management that implementation is necessary; and (3) all of the necessary resources have been secured.	<ul style="list-style-type: none"> <li>• Staff resources</li> <li>• Grant funding or alternative source</li> <li>• Contractor funding</li> <li>• Partnerships</li> </ul>	Once triggered	Once triggered, 2-3 years; one-time	X	X	X	X	X	X	X	X	X	X		Sewage Infrastructure and Activities, Septic Tanks	Sewer Districts	

**Table I.6.2 County of San Diego  
 Optional Strategies (continued)**

ID	Strategy	Triggers (B.3.b.(1)(b)(v))	Funds/Resources, (B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementatio n Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed										Physical and Biological Benefits		Source <sup>2</sup> (B.3.b(1)(a)(i))	Collaborating Agencies (B.3.b.(1)(c))
						Bacteria <sup>1</sup>	Metals	Organics	Sediment	Pesticides	Nutrients	Oil & Grease	Dissolved Minerals	Trash	Flow	Habitat/Wildlife			
CoSD-Opt5	Implement a program for on-site wastewater treatment (septic) systems. May include mapping and risk assessment, inspection, or maintenance practices.	Implementation of this strategy may be triggered if (1) an interim goal has not been met; and (2) it has been determined by the County of San Diego through adaptive management that implementation is necessary; and (3) septic systems have been determined to be a pollutant sources to the MS4; and (4) all of the necessary resources have been secured.	<ul style="list-style-type: none"> <li>• Staff resources</li> <li>• Grant funding or alternative source</li> <li>• Contractor funding</li> <li>• Partnerships</li> </ul>	Once triggered	Once triggered, 2-3 years; as needed, as resources allow	X	X	X	X	X	X	X	X	X			Sewage Infrastructure and Activities, Septic Tanks		
CoSD-Opt6	Divert persistent dry weather flows from storm drains to sewer	Implementation of this strategy may be triggered if (1) an interim goal has not been met; and (2) it has been determined by the County of San Diego through adaptive management that implementation is necessary; and (3) permission is granted from sewer agency; and (4) ground water or permitted discharges have been ruled out; and (5) all of the necessary resources have been secured.	<ul style="list-style-type: none"> <li>• Staff resources</li> <li>• Grant funding or alternative source</li> <li>• Contractor funding</li> <li>• Engineering design</li> <li>• Environmental review</li> <li>• Permits</li> <li>• Ongoing funding for operation/maintenance</li> </ul>	Once triggered	Once triggered, 3-6 years per project	X	X	X	X	X	X	X	X	X	X		Roads, Streets, Freeways and Over-irrigation	Sewer Districts	

**Provision B.3.b.(1)(b)(ii) - Incentives or programs that may be implemented to encourage or implement projects to retrofit areas of existing development**

**Table I.6.2 County of San Diego  
 Optional Strategies (continued)**

ID	Strategy	Triggers (B.3.b.(1)(b)(v))	Funds/Resources, (B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementatio n Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed										Physical and Biological Benefits		Source <sup>2</sup> (B.3.b(1)(a)(i))	Collaborating Agencies (B.3.b.(1)(c))
						Bacteria <sup>1</sup>	Metals	Organics	Sediment	Pesticides	Nutrients	Oil & Grease	Dissolved Minerals	Trash	Flow	Habitat/Wildlife			
CoSD-Opt7	Implement trash capture program (e.g., retrofit storm drain intakes with trash capture devices)	Implementation of this strategy may be triggered if (1) an interim goal has not been met; and (2) it has been determined by the County of San Diego through adaptive management that implementation is necessary; and (3) baseline study completion and success; and (4) focus areas identification; and (5) detailed inlet inventory of focus areas; and (6) all of the necessary resources have been secured.	<ul style="list-style-type: none"> <li>• Staff resources</li> <li>• Grant funding or alternative source</li> <li>• Contractor funding</li> <li>• Equipment</li> <li>• Permits</li> <li>• Ongoing funding for operation/maintenance</li> </ul>	Once triggered	Baseline study 2-3 years; FY 15-16 implementation as needed and as resources allow	X									X		X	Roads, Streets, Freeways	

**Table I.6.2 County of San Diego  
 Optional Strategies (continued)**

ID	Strategy	Triggers (B.3.b.(1)(b)(v))	Funds/Resources, (B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementatio n Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed										Physical and Biological Benefits		Source <sup>2</sup> (B.3.b(1)(a)(i))	Collaborating Agencies (B.3.b.(1)(c))
						Bacteria <sup>1</sup>	Metals	Organics	Sediment	Pesticides	Nutrients	Oil & Grease	Dissolved Minerals	Trash	Flow	Habitat/Wildlife			
CoSD-Opt8	Implement a Green Streets Retrofits Program	Implementation of this strategy may be triggered on a project-by-project basis if (1) a specified interim goal has not been met; and (2) it has been determined by the County of San Diego through adaptive management that implementation is necessary; and (3) pilot program success; and (4) all of the necessary resources have been secured.	Each green street retrofit project is preliminary estimated to cost an average of \$5,500,000 per linear mile of retrofit for construction. Resources include: • Staff resources • Grant funding or alternative source • Contractor funding • Engineering or landscaping design • Permits • Environmental review • Right of way acquisition • Ongoing funding for operation/maintenance	Once triggered	Once triggered, 3-7 years per project; ongoing operation & maintenance thereafter	X	X	X	X	X	X	X	X	X			Roads, Streets, Parking		

**Table I.6.2 County of San Diego  
 Optional Strategies (continued)**

ID	Strategy	Triggers (B.3.b.(1)(b)(v))	Funds/Resources, (B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementatio n Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed										Physical and Biological Benefits		Source <sup>2</sup> (B.3.b(1)(a)(i))	Collaborating Agencies (B.3.b.(1)(c))
						Bacteria <sup>1</sup>	Metals	Organics	Sediment	Pesticides	Nutrients	Oil & Grease	Dissolved Minerals	Trash	Flow	Habitat/Wildlife			
CoSD-Opt9	Construct Treatment Control BMPs (retrofits projects)	Implementation of this strategy may be triggered if (1) an interim goal has not been met; and (2) it has been determined by the County of San Diego through adaptive management that implementation is necessary; and (3) all of the necessary resources have been secured.	<ul style="list-style-type: none"> <li>• Staff resources</li> <li>• Grant funding or alternative source</li> <li>• Contractor funding</li> <li>• Engineering or landscaping design</li> <li>• Permits</li> <li>• Environmental review</li> <li>• Ongoing funding for operation/maintenance</li> </ul>	Once triggered	Once triggered, 4-7 years per project; ongoing operation & maintenance thereafter	Varies by BMP Selected										Varies		Varies	
CoSD-Opt10	Implement an alternative compliance program to enable "offsite" compliance for new and redevelopment projects.	Implementation of this strategy may be triggered if (1) an interim goal has not been met; and (2) it has been determined by the County of San Diego through adaptive management that implementation is necessary; and (3) all of the necessary resources have been secured.	<ul style="list-style-type: none"> <li>• Staff resources</li> <li>• Grant funding or alternative source</li> <li>• Contractor funding</li> <li>• Partnerships</li> <li>• Engineering design</li> <li>• Permits</li> <li>• Environmental review</li> <li>• Right of way acquisition, if needed</li> <li>• Ongoing funding for operation/maintenance</li> </ul>	Once triggered	Once triggered, 3-6 years per project	X	X	X	X	X	X	X	X	X	X	X	X	Construction (Including Residential, Commercial, Industrial, and Municipal Areas)	

**Provision B.3.b.(1)(b)(iii) - Incentives or programs that may be implemented to encourage or implement projects that will rehabilitate the conditions of channels or habitats**

**Table I.6.2 County of San Diego  
 Optional Strategies (continued)**

ID	Strategy	Triggers (B.3.b.(1)(b)(v))	Funds/Resources, (B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementatio n Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed										Physical and Biological Benefits		Source <sup>2</sup> (B.3.b(1)(a)(i))	Collaborating Agencies (B.3.b.(1)(c))
						Bacteria <sup>1</sup>	Metals	Organics	Sediment	Pesticides	Nutrients	Oil & Grease	Dissolved Minerals	Trash	Flow	Habitat/Wildlife			
CoSD- Opt11	Flood Control Channel Rehabilitation Projects (e.g., removal of impervious lining in flood control channel and replacement with earthen or vegetated surface)	Implementation of this strategy may be triggered if (1) an interim goal has not been met; and (2) it has been determined by the County of San Diego through adaptive management that implementation is necessary; and (4) engineering design, monitoring, and outreach plans are approved; and (5) all of the necessary resources have been secured.	Project costs vary by size and complexity. Resources include: • Staff resources • Grant funding or alternative source • Contractor funding • Partnerships • Engineering design • Permits • Environmental review • Right of way acquisition, if needed • Ongoing funding for operation/maintenance	Once triggered	Once triggered, 4-7 years per project; ongoing operation & maintenance thereafter	X	X	X	X	X	X	X	X			X	X	Outfalls, Channel Drop Structures, Flood Control Basins, Impervious Surfaces <sup>3</sup>	

**Table I.6.2 County of San Diego  
 Optional Strategies (continued)**

ID	Strategy	Triggers (B.3.b.(1)(b)(v))	Funds/Resources, (B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementatio n Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed										Physical and Biological Benefits		Source <sup>2</sup> (B.3.b(1)(a)(i))	Collaborating Agencies (B.3.b.(1)(c))
						Bacteria <sup>1</sup>	Metals	Organics	Sediment	Pesticides	Nutrients	Oil & Grease	Dissolved Minerals	Trash	Flow	Habitat/Wildlife			
CoSD- Opt12	Implement a program to remove invasive non-native plants (i.e. Arundo) upstream areas rivers or tributaries.	Implementation of this strategy may be triggered if (1) an interim goal has not been met; and (2) it has been determined by the County of San Diego through adaptive management that implementation is necessary; and (3) community support and partnerships established; and (4) it has been determined that invasive plants have been found to have an impact on water quality; and (5) all of the necessary resources have been secured.	<ul style="list-style-type: none"> <li>• Staff resources</li> <li>• Grant funding or alternative source</li> <li>• Contractor funding</li> <li>• Partnerships</li> </ul>	Once triggered	Once triggered, 1-2 years per project	X	X	X	X	X	X	X	X	X	X	X	X	Open Space Areas <sup>3</sup>	

**Table I.6.2 County of San Diego  
 Optional Strategies (continued)**

ID	Strategy	Triggers (B.3.b.(1)(b)(v))	Funds/Resources, (B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementatio n Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed										Physical and Biological Benefits		Source <sup>2</sup> (B.3.b(1)(a)(i))	Collaborating Agencies (B.3.b.(1)(c))
						Bacteria <sup>1</sup>	Metals	Organics	Sediment	Pesticides	Nutrients	Oil & Grease	Dissolved Minerals	Trash	Flow	Habitat/Wildlife			
CoSD- Opt13	Habitat Restoration and rehabilitation projects in County Parks	Implementation of this strategy may be triggered if (1) an interim goal has not been met; and (2) it has been determined by the County of San Diego through adaptive management that implementation is necessary; and (3) all of the necessary resources have been secured.	<ul style="list-style-type: none"> <li>• Staff resources</li> <li>• Grant funding or alternative source</li> <li>• Contractor funding</li> <li>• Partnerships</li> <li>• Restoration / Rehabilitation Designs Approved</li> <li>• Environmental Permits issued</li> <li>• CEQA / NEPA Environmental review</li> <li>• Ongoing funding for maintenance and monitoring</li> </ul>	Once triggered	Once triggered 4-7 years per project; ongoing operation & maintenance thereafter	X	X	X	X	X	X	X	X	X	X	X	Open Space Areas <sup>3</sup>		
<b>WMA Strategies (Optional Strategies, B.3.b.(2))</b>																			
WMA-1	Implement Sustainable Landscapes Program to encourage landscape retrofits.	Implementation of this strategy may be triggered if (1) it has been determined through adaptive management that implementation is necessary; and (2) all of the necessary resources have been secured. Continue implementation when the funding and incentives items are secured.	<ul style="list-style-type: none"> <li>• Staff resources; 1 PY per Jurisdiction</li> <li>• Grant funding</li> <li>• Incentive items</li> <li>• Partnerships</li> </ul>	FY 2016-17	Continuous until grant funding and incentives are depleted	X	X		X		X		X				Varies	NGOs, Copermittees, other Agencies	

**Table I.6.2 County of San Diego  
 Optional Strategies (continued)**

ID	Strategy	Triggers (B.3.b.(1)(b)(v))	Funds/Resources, (B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementatio n Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed										Physical and Biological Benefits		Source <sup>2</sup> (B.3.b(1)(a)(i))	Collaborating Agencies (B.3.b.(1)(c))
						Bacteria <sup>1</sup>	Metals	Organics	Sediment	Pesticides	Nutrients	Oil & Grease	Dissolved Minerals	Trash	Flow	Habitat/Wildlife			
WMA-2	Implement an invasive species removal program in upstream areas rivers or tributaries.	Implementation of this strategy may be triggered if (1) it has been determined through adaptive management that implementation is necessary; and (2) community support and partnerships established; and (3) all of the necessary resources have been secured.	<ul style="list-style-type: none"> <li>• Staff resources; 1/2 PY per Jurisdiction</li> <li>• Grant funding</li> <li>• Permits</li> <li>• Partnerships</li> <li>• Identification of contractors</li> </ul>	Once triggered, FY 2016-18	Continuous until grant funding depleted	X	X	X	X	X	X	X	X	X			Varies	NGOs, SDB Copermittees,	

- Notes:
1. Orange-shaded cell indicates highest priority water quality condition for the San Diego Bay WMA.
  2. The identified sources include high and medium priority sources of the highest priority water quality condition in the San Diego Bay WMA.
  3. Source not identified as a high or medium priority in the San Diego Bay WQIP. It is anticipated this strategy will have multiple benefits to address the highest priority and other priority water quality conditions.

**Table I.6.3 County of San Diego  
 Minimum Best Management Practices**

Minimum Best Management Practices Supporting Watershed Strategies	Pollutant Sources					Pollutants Addressed					
	Residential	Municipal	Commercial	Industrial	Construction	Bacteria	Nutrients	Metals	Trash	Sediment	Dry Weather Flow
1. Eliminate illicit connections to the municipal separate storm sewer system (MS4; Hereafter, “storm drain system”).	•	•	•	•	•	•	•	•		•	•
2. Eliminate illicit non-storm water discharges.	•	•	•	•	•	•	•	•		•	•
3. Properly dispose of process and wash water.	•	•	•	•	•	•	•	•	•	•	•
4. Properly dispose of vehicle and equipment wash water/Eliminate the discharge of vehicle and equipment wash water.	•	•	•	•	•	•	•	•		•	•
5. Properly dispose of water from fire sprinkler maintenance activities.	•	•	•	•	•			•		•	•
6. Eliminate irrigation runoff.	•	•	•	•		•	•				•
7. Properly dispose of discharges from swimming pools, spas, fountains, reflective pools, ponds, and filter backwash.	•	•	•	•							•
8. Control air conditioning condensation discharges.	•	•	•	•				•			•
9. Eliminate pumped groundwater, foundation and footing drain discharges.	•	•	•	•	•						•

Minimum Best Management Practices Supporting Watershed Strategies	Pollutant Sources					Pollutants Addressed					
	Residential	Municipal	Commercial	Industrial	Construction	Bacteria	Nutrients	Metals	Trash	Sediment	Dry Weather Flow
10. Eliminate floor mat cleaning discharges.	•	•	•	•		•					•
11. Minimize rising groundwater, diverted stream flows, uncontaminated groundwater infiltration, springs, riparian habitat/wetland flows, potable water sources, and foundation/ footing drain discharges.	•	•	•	•	•						•
12. Regularly clean and maintain structural BMPs and LID installations to ensure proper performance.	•	•	•	•		•	•	•	•	•	
13. Protect unpaved areas, including landscaping, from erosion using vegetation or physical stabilization.	•	•	•	•	•	•	•			•	
14. Regularly clean parking lots.	•	•	•	•	•			•	•	•	
15. Keep storm drain inlets and under drains free of sediment, trash, and debris.	•	•	•	•		•	•	•	•	•	
16. Implement good housekeeping to keep site free of trash and debris.	•	•	•	•	•	•		•	•	•	
17. Provide and maintain secondary containment to catch spills when storing potential liquid pollutants in outdoor areas.	•	•	•	•	•			•			
18. Properly store and dispose of hazardous substances.	•	•	•	•	•			•			

Minimum Best Management Practices Supporting Watershed Strategies	Pollutant Sources					Pollutants Addressed					
	Residential	Municipal	Commercial	Industrial	Construction	Bacteria	Nutrients	Metals	Trash	Sediment	Dry Weather Flow
19. Cover, contain, and/or elevate materials stored outside that may become a source of pollutants in storm water or non-storm water.	•	•	•	•	•		•	•	•	•	
20. Label containers to prevent mishandling of hazardous materials and other potential pollutants.	•	•	•	•	•						
21. Properly manage pesticides and fertilizers.	•	•	•	•			•				
22. Develop a written plan that identifies appropriate BMPs, including spill response, and includes procedures for proper implementation.	•	•	•	•	•	•	•	•	•	•	•
23. Implement controls to prevent pollution from exposed outdoor work areas.	•	•	•	•			•	•	•	•	
24. Prevent or capture liquid leaks from vehicles and equipment.	•	•	•	•	•			•			
25. Maintain a readily accessible spill cleanup kit that is appropriate for the type of material stored.	•	•	•	•	•	•		•			
26. Drain fluids from inoperable vehicles and store or dispose of appropriately.	•	•	•	•				•			
27. Immediately clean up spills.	•	•	•	•	•	•		•			

Minimum Best Management Practices Supporting Watershed Strategies	Pollutant Sources					Pollutants Addressed					
	Residential	Municipal	Commercial	Industrial	Construction	Bacteria	Nutrients	Metals	Trash	Sediment	Dry Weather Flow
28. Temporarily protect storm drains from non-storm water discharges while conducting activities that have the potential to result in a discharge.	•	•	•	•	•	•		•		•	
29. Provide pollution prevention signage for storm drains.	•	•	•	•		•	•	•	•	•	•
30. Implement a pollution prevention system for uncovered outdoor sources of pollutants.	•	•	•	•	•	•	•	•	•	•	
31. Train appropriate employees on storm water pollution prevention.	•	•	•	•	•	•	•	•	•	•	•
32. Keep trash/waste storage areas free of exposed trash, sediment, and debris.	•	•	•	•	•	•			•	•	
33. Properly store and dispose of green waste.	•	•	•	•		•	•			•	
34. Manage animal waste and animal washing in a manner that prevents transport of wastes and wash water off-site.	•	•	•	•		•	•			•	
35. Protect waste storage areas from contact with storm water and non-storm water flows on to the property.	•	•	•	•	•	•			•		

Notes:

- a. For more detailed descriptions of each BMP, see the respective Jurisdictional Runoff Management Plan for each agency, available online at [http://www.projectcleanwater.org/index.php?option=com\\_content&view=article&id=243&Itemid=211](http://www.projectcleanwater.org/index.php?option=com_content&view=article&id=243&Itemid=211).

## **I.7 CITY OF IMPERIAL BEACH STRATEGIES**

The City of Imperial Beach (Imperial Beach) is the southernmost jurisdiction in the San Diego Bay WMA. Long term planning for Imperial Beach includes integration of LID and green street concepts into capital improvement projects (CIPs) and other opportunities as they become available. In addition, Imperial Beach requires source control and LID BMPs as conditions on standard development projects greater than \$50,000.

Low flow and first flush diversions have been installed within Imperial Beach’s MS4 that capture trash and dry weather flows. Imperial Beach’s Environmental Division incorporates the underserved community in most education activities, which is particularly important to the City because of the large Spanish-speaking community. Imperial Beach maintains ongoing collaboration with the Fish and Wildlife Service on the cleaning and maintenance of MS4 outfall locations along San Diego Bay. In addition, Imperial Beach collaborates with the Navy on annual inspections and operation and maintenance for the portion of the City’s MS4 that drains to a detention basin on Navy property. Imperial Beach also actively participates and partners with multiple agencies and stakeholders in the restoration of South San Diego Bay.

Strategies and implementation schedules, presented in Table I.7.1, were identified using best information available on efficiency, effectiveness, and level of effort estimated to achieve compliance with numeric goals. The adaptive management process provides the framework to evaluate progress toward meeting the goals and allows for modification of strategies. As strategies are modified, the WQIP is updated. The implementation of each strategy is contingent upon annual budget approvals and funding availability.

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**Table I.7.1 City of Imperial Beach  
 Jurisdictional Strategies**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source (B.3.b(1)(a)(i))  Med to High WQIP priority sources	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/ Wildlife		
<b>JRMP Strategies (E.3.b.(1)(a))</b>														
<b>E.2 Illicit Discharge, Detection, and Elimination (IDDE) Program</b>														
IB-01	Imperial Beach Illicit Discharge Detection and Elimination Program	Refer to JRMP Section 4. This is an ongoing and budgeted JRMP activity. Frequency of implementation is continuous with initial response time by City staff under 1 hour for most IDDE cases. Investigate and eliminate dry weather discharges and illegal connections to the MS4 as reported to the City or identified by staff. Utilize appropriate enforcement actions to achieve compliance. Minimum BMPs provided in Attachment 1 and Attachment 3.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Illegal discharges and connections	Env Division
IB-04	Dry weather field screening of major MS4 outfalls	Refer to JRMP Section 4. This is an ongoing and budgeted JRMP activity. Perform visual assessment of major MS4 outfalls twice per year to support IDDE efforts and to identify maintenance needs. Minimum BMPs include cleanup of any trash and debris at outfall location post field screening. The TRNERR performs annual maintenance and cleanup at the City's major outfall at 5 <sup>th</sup> and Grove.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Illegal discharges	Env Division, TRNERR
IB-04a	Persistent dry weather flow monitoring	Refer to JRMP Section 4. This is a new and ongoing budgeted JRMP activity. The Env Division will perform dry weather field screening monitoring at major outfalls with persistent dry weather flows, which is defined as 3 consecutive non-storm water discharges as observed through IB-04. Monitoring results will support IDDE efforts and WQIP priorities.	Jurisdictional	FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Illegal discharges	Env Division

**Table I.7.1 City of Imperial Beach  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source (B.3.b.(1)(a)(i))  Med to High WQIP priority sources	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/ Wildlife		
<b>E.3 Development Planning</b>														
<b>Non-Priority Development Projects</b>														
IB-05	Provide storm water BMP conditions during the development review phase for non-Priority Development Projects	Refer to JRMP Section 5. This is an ongoing and budgeted JRMP activity. Administer a program to ensure implementation of source control BMPs to minimize pollutant generation through project design and implement LID BMPs to maintain or restore hydrology of the area, where applicable and feasible and in accordance to the Imperial Beach BMP Design Manual (IB-07). BMPs are required as conditions of project approval. BMPs include the protection of trash storage areas. Enhanced BMPs are also conditioned through IB-05a for medium sized projects.	Jurisdictional	FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Land Development, Residential, Commercial, Municipal areas, trash storage areas	Env Division, Public Works, Community Development
<b>Priority Development Projects (PDPs)</b>														
IB-06	Provide storm water BMP conditions during the development review phase for Priority Development Projects.	Refer to JRMP Section 5. This is an ongoing and budgeted JRMP activity. Priority Development Projects as defined by IBMC requires BMP certification by the City Engineer to meet treatment and retention standards in the Imperial Beach BMP Design Manual (IB-07). Structural BMPs are required as conditions of project approval.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	Land Development, Residential, Commercial, Municipal areas, trash storage areas	Community Development, Public Works, City Engineer	

**Table I.7.1 City of Imperial Beach  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source (B.3.b.(1)(a)(i))  Med to High WQIP priority sources	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/ Wildlife		
IB-07	City of Imperial Beach BMP Design Manual	Refer to JRMP Section 5 and IBMC. This is an update to an ongoing JRMP activity. Implement the new BMP design standards applicable to all development and redevelopment projects. PDPs must meet updated treatment and retention standards. The effective date for the new minimum BMP standards for development planning projects is currently scheduled for 12/24/15 and requires an update to the IBMC. Effective date may change pending approval of RWQCB Tentative Order R9-2015-0100. The Imperial Beach BMP Design Manual will be the guiding policy document for minimum BMPs for development and redevelopment projects.	Jurisdictional	FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Land Development, Residential, Commercial, Municipal areas, trash storage areas	Community Development, Public Works, City Engineer
IB-08	Long-term Structural BMP Maintenance Agreement	Refer to JRMP Section 5. This is an ongoing and budgeted JRMP activity. Frequency is continuous for each applicable development project. Implement a legal agreement, covenant, CEQA mitigation requirement, and/or conditional use permit to ensure long-term maintenance of structural BMPs.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Residential, Commercial areas	Public Works, Community Development
IB-10	Structural BMP Maintenance Verification, Database Management, and Inspection	Refer to JRMP Section 5. This is an ongoing and budgeted JRMP activity. The Environmental Division verifies through inspections the long-term maintenance of structural treatment control BMPs at completed PDPs. Frequency of inspections is once per year for BMPs designated as high priority and no less than once per permit cycle for all inventoried BMPs. BMPs are verified for continues operation and maintenance and site inspection include verification of appropriate source control BMPs, which help address the property pollutants of trash and sediment.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Residential, Commercial areas	Env Division

**Table I.7.1 City of Imperial Beach  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed						Source (B.3.b.(1)(a)(i))  Med to High WQIP priority sources	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow		
<b>E.4 Construction Management</b>													
IB-14	Approval of a Storm Water Management Plan or equivalent plan for private development projects	Refer to JRMP Section 6. This is an ongoing and budgeted JRMP activity. Private development project applicants must submit and receive approval of a Storm Water Management Plan (or for Construction General Permit a Storm Water Pollution Prevention Plan) prior to receiving a building, grading, or demolition permit. The plan must demonstrate how each project will implement minimum BMPs for the following categories: project planning; housekeeping; non-storm water management; erosion control; sediment control; run-on and run-off control; and active or passive sediment treatment systems. Minimum BMPs provided in Attachment 3.	Jurisdictional	FY16	Continuous-Ongoing			X	X	X		Construction	Community Development

Table I.7.1 City of Imperial Beach  
 Jurisdictional Strategies (continued)

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source (B.3.b.(1)(a)(i))  Med to High WQIP priority sources	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/ Wildlife		
IB-14a	Inspect and verify implementation of construction management BMPs and maintain a continuous inventory of construction sites and enforcement actions for private development projects	Refer to JRMP Section 6. This is an ongoing and budgeted JRMP activity. The City considers all construction activity a potential high threat to water quality and verifies implementation of minimum BMPs through inspections for the following categories: project planning; housekeeping; non-storm water management; erosion control; sediment control; run-on and run-off control; and active or passive sediment treatment systems. Minimum BMPs provided in Attachment 3. The frequency of inspections at a minimum includes one monthly site inspection. Inspection frequencies also include one initial site inspection at the start of grading or construction activities, drive-by inspections of all active construction sites prior to forecast rain events, and verification of site BMPs during any subsequent building inspection at the project site. The Community Development Department maintains a continuous inventory on the City's HTE database system of active construction sites and notes on enforcement actions.	Jurisdictional	FY16	Continuous-Ongoing			X	X	X			Construction	Community Development, Building Official
IB-15	Approval of a Storm Water Management Plan or equivalent plan for public capital projects	Refer to JRMP Section 6. This is an ongoing and budgeted JRMP activity. Contractors for public development (CIP) projects must submit and receive approval of a Storm Water Management Plan (or for Construction General Permit a Storm Water Pollution Prevention Plan) prior to receiving a notice to proceed. The plan must demonstrate how each project will implement minimum BMPs for the following categories: project planning; housekeeping; non-storm water management; erosion control; sediment control; run-on and run-off control; and active or passive sediment treatment systems. Minimum BMPs provided in Attachment 3.	Jurisdictional	FY16	Continuous-Ongoing			X	X	X			Construction	Public Works

**Table I.7.1 City of Imperial Beach  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source (B.3.b.(1)(a)(i))  Med to High WQIP priority sources	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/ Wildlife		
IB-15a	Inspect and verify implementation of construction management BMPs and maintain a continuous inventory of construction sites and enforcement actions for public development (CIP) projects	Refer to JRMP Section 6. This is an ongoing and budgeted JRMP activity. The City considers all construction activity a potential high threat to water quality and verifies implementation of minimum BMPs through inspections for the following categories: project planning; housekeeping; non-storm water management; erosion control; sediment control; run-on and run-off control; and active or passive sediment treatment systems. Minimum BMPs provided in Attachment 3. The frequency of inspections for implementation occurs daily by the Public Works Inspector that is designated to each project. The Public Works Inspector maintains a continuous inventory of active construction activity and maintains Daily Inspection Reports of enforcement actions.	Jurisdictional	FY16	Continuous-Ongoing			X	X	X			Construction	Public Works
<b>E.5 Existing Development</b>														
<b>Commercial, Industrial, Municipal, and Residential Facilitates and Areas</b>														
IB-17	Administer a program that requires implementation of minimum BMPs at existing development that covers pollutant generating activities from commercial, residential, and municipal areas (no industrial areas in the City).	Refer to JRMP Section 7. This is an ongoing and budgeted JRMP activity. Frequency of inspections is described below for each category of development. The City currently does not have any industrial areas. The Environmental Division administers this JRMP activity and maintains an annual watershed based inventory of existing development and inspections. Minimum BMPs provided in Attachment 1 and Attachment 2.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X			Commercial, Residential, and Municipal areas	Env Division, GIS Administrator

**Table I.7.1 City of Imperial Beach  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source (B.3.b.(1)(a)(i))  Med to High WQIP priority sources	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/ Wildlife		
IB-19	Inspect and verify implementation of minimum BMPs for municipal areas and activities	Refer to JRMP Section 7. This is an ongoing and budgeted JRMP activity. The responsibility to implement and maintain various municipal BMPs is a task shared by every employee in the Public Works Department. The Environmental Division performs annual training to review minimum BMPs and verifies the implementation of BMPs through an onsite annual inspection at every City owned facility or park. Minimum BMPs provided in Attachment 1.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	Municipal areas and activities	Env Division, Public Works	
IB-20	Inspect and verify implementation of minimum BMPs for residential areas and commercial facilities	Refer to JRMP Section 7. This is an ongoing and budgeted JRMP activity. The Environmental Division performs at a minimum one onsite inspection of each commercial business at least once per permit cycle with no less than 20% of inventoried sites inspected each year. Residential areas receive ongoing JRMP baseline inspections through the IDDE program. Residential and commercial areas also benefit from the enhanced targeted Neighborhood Inspection Program (IB-21), weekly illegal dumping collection (IB-25), annual home front cleanup event (IB-26), and pet waste bag program (IB-27). Minimum BMPs provided in Attachment 2.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	Commercial, Residential areas	Env Division,	
IB-29	Sewer System Management Program (SSMP)	Refer to JRMP Section 7. This is an ongoing and budgeted JRMP activity. The operation and maintenance of the sewer collection system is a top priority and managed in accordance with the City's SSMP. The City jets 100% of its entire sewer collection system annual and inspects and maintains 11 sewer pump stations daily. The City budgets on average \$400,000 in sewer CIPs a year. All Public Works staff receives annual training on how to identify and respond to a SSO.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X				X	Sewer Overflows	Public Works	

**Table I.7.1 City of Imperial Beach  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source (B.3.b.(1)(a)(i))  Med to High WQIP priority sources	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/ Wildlife		
IB-30	Special Events Permit	Refer to JRMP Section 7. This is an ongoing and budgeted JRMP activity. The City provides storm water BMP conditions on every special event permit or conditional use permit. Applicable special event BMPs are the same as Commercial BMPs provided in Attachment 2 and evaluated for each event separately. Examples of special event BMP conditions include prevention of illegal discharges, protection of cooking area, trash and recycling containers, and proper waste management and disposal.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X			X				Special Events	Public Safety, Community Development, Public Works
IB-31	Residential household hazardous waste program (Incentive Program and Multi-Jurisdiction Program)	Refer to JRMP Section 7. This is an ongoing and budgeted JRMP activity. The City partners with the City of Chula Vista and other cities in South Bay to offer free disposal options of HHW for residents. Options include convenient drop off locations, special event drop off, and disabled resident home collection. By incentivizing easy collection of HHW then less material ends up being illegally discharged.	Jurisdictional	Prior to FY16	Continuous-Ongoing		X	X					Illegal dumping	Env Division, Chula Vista, La Mesa, Lemon Grove, National City
<b>MS4 Infrastructure</b>														
IB-32	Catch basin, MS4 line, open channels, and outfalls operation and maintenance	Refer to JRMP Section 7. This is an ongoing and budgeted JRMP activity. The City at a minimum inspects and cleans 100% of the City's 92 catch basins, 5-miles of MS4 lines, open channels, and outfalls with a frequency of at least once per year prior to the start of the rainy season. Post rain event inspections may require more frequent cleaning at known areas in the system. Preventative maintenance prevents debris from reaching the receiving waters and ensures full conveyance of storm water system during storm events.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X			Various	Public Works

**Table I.7.1 City of Imperial Beach  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed						Source (B.3.b.(1)(a)(i))  Med to High WQIP priority sources	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow		
<b>Roads, Streets, and Parking Lots</b>													
IB-24	Street sweeping program	Refer to JRMP Section 7. This is an ongoing and budgeted JRMP activity. The City implements an aggressive street sweeping program to target trash, sediment, and debris that collects on the street. The City sweeps a total of 130 curb miles per month, which provides 100% coverage of the entire City at the following sweeping frequencies: Weekly: Commercial areas including open stripped and raised curb medians, Ocean Lane, and parking lots; Twice per month: Beachfront posted residential areas; Monthly: Non-beachfront residential areas and paved alleys;	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X			Streets, Parking lot, Commercial, Residential,	Env Division,
<b>Pesticides, Herbicides, and Fertilizer BMP Program</b>													
IB-28	Pesticide, herbicide, and fertilizer management	Refer to JRMP Section 7. This is an ongoing and budgeted JRMP activity. The City and its contractors are required to implement an integrated pest management (IPM) program to address application, storage, disposal and use of chemical applications. City Council Policy 611 minimizes the use of chemical treatment through IPM strategies. The City also maintains a Unified Program Facility Permit through the County of San Diego. Minimum BMPs provided in Attachment 1.	Jurisdictional	Prior to FY16	Continuous-Ongoing		X	X			X	Parks, landscape areas	Public Works

**Table I.7.1 City of Imperial Beach  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source (B.3.b.(1)(a)(i))  Med to High WQIP priority sources	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/ Wildlife		
<i>Retrofit and Rehabilitation in Areas of Existing Development</i>														
IB-34	Perform inspections and provide maintenance to LID BMP facilities installed throughout the City	<p>This is an ongoing and budgeted JRMP activity to maintain various LID BMPs installed by the City. The City or its contractors provide annual maintenance of municipal areas that get retrofit with LID facilities to treat or infiltrate storm water runoff. Maintenance varies according to the select BMP. The following include the list of major retrofit projects in the City:</p> <ul style="list-style-type: none"> <li>• Bikeway Access Bioswale (February 2014)</li> <li>• Sports Park Crosswalk LID (August 2014)</li> <li>• Palm Ave Eco Bikeway LIDs (December 2013)</li> <li>• Skate Park Boiswale and Infiltration Trench (January 2011)</li> <li>• Alley Infiltration Area (800 block between 10<sup>th</sup> and 11<sup>th</sup>) (May 2007)</li> <li>• Emory and Essex storm water retention basin (September 2006)</li> <li>• Beachfront Sidewalk and Street End Permeable Pavers (Multiple)</li> <li>• Baseball Field Permeable Concrete (2003)</li> </ul>	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Various	Public Works, FWS, Caltrans, TRNERR, State Parks, Sandag

**Table I.7.1 City of Imperial Beach  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source (B.3.b.(1)(a)(i))  Med to High WQIP priority sources	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/ Wildlife		
IB-34b	10 <sup>th</sup> Street Bikeway Access Project (Storm water bioswale and habitat restoration)	The City completed the Bikeway Access project in February 2014 that converted 2.86 acres storage yard for the Public Works Department to a bikeway access spur and trail staging areas to the Bay Shore Bikeway. The project included a bioswale to treat storm water from the Public Works faculty and treat flow from the surrounding residential neighborhood. The project also included over 1 acre of native habitat restoration. The City will continue to maintain this new facility in partnership with the FWS who are also completing the adjacent Birder's Point project (IB-54).	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Residential, Municipal	State Parks, FWS, Public Works
IB-35	Perform inspections and provide maintenance for storm drain inlet filters	This is an ongoing and budgeted JRMP activity to maintain 10 storm drain inlet filters at municipal locations and high trash generating areas. The filters receive quarterly maintenance by a contract company.	Jurisdictional	Prior to FY16	Continuous-Ongoing				X				Municipal areas, high trash areas	Env Division, Contractors
IB-37	Perform inspection and provide maintenance for the low flow and first flush storm water diverters at Palm Ave and Date Ave and vehicle and equipment washing diverters	This is an ongoing and budgeted JRMP activity. The City maintains 2 major storm water diverters along the beachfront at Palm Ave (installed January 2009) and Date Ave (installed 2004 and refurbished October 2014) that captures and diverts 137 acres of low flow and first flush storm water. The City also maintains 3 vehicle and equipment washing areas (Public Works, Fire Station, and Lifeguards) that are connected to the sanitary sewer. Maintenance frequency is monthly.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X			Commercial, Residential, Municipal activities	Sewer Division,

Table I.7.1 City of Imperial Beach  
 Jurisdictional Strategies (continued)

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed						Source (B.3.b.(1)(a)(i))  Med to High WQIP priority sources	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow		
IB-38	Integrate LID retrofits where feasible into CIP rehabilitation projects and partner with local, state and federal agencies to retrofit non-jurisdictional areas	<p>Refer to JRMP Section 7. This is an ongoing and budgeted JRMP activity. The City integrates LIDs into the design phase of CIP projects as discussed in optional strategy IB-13. The City also has a strong working relationship with the US Fish and Wildlife (FWS), Naval Base Coronado, Tijuana River National Estuarine Research Reserve, CA State Parks, Port of San Diego, County of San Diego, South Bay Union School District, and Sweetwater School District, all of which who share jurisdictional authority within the City limit. Successful partnerships among these agencies have resulted in both major and minor retrofit projects that provide significant water quality benefit and enhance wildlife habitat. These projects include:</p> <ul style="list-style-type: none"> <li>• Napalitano property restoration IB-34a (2002)</li> <li>• 220 acre salt pond restoration in south San Diego Bay (2011)</li> <li>• Mar Vista High School drainage enhancement by Public Works to disconnect impervious drainage channel (2009)</li> <li>• TRNERR bioswale at 3<sup>rd</sup> and Caspian (2014)</li> <li>• Designation of Pond 20 as mitigation bank (2015)</li> <li>• 55 acre Otay River Flood Plan restoration with River Partners (underway)</li> <li>• 70 acres Otay River Estuary Restoration project (underway)</li> </ul>	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	Various	Env Division, Local, State, and Federal agencies

**Table I.7.1 City of Imperial Beach  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source (B.3.b.(1)(a)(i))  Med to High WQIP priority sources	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/ Wildlife		
IB-40	Implement LID retrofits in residential and commercial areas where feasible for non-PDP redevelopment projects	Refer to JRMP Section 7 and Section 5. This is an ongoing and budgeted JRMP activity. During the plan check phase the City evaluates non-PDP redevelopment projects for public improvement enhancements, which includes conditions to treat storm water. See strategy IB-05a.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	Residential, Commercial areas	Community Development, Public Works	
<b>E.6 Enforcement Response Plan</b>														
IB-42	Storm water code enforcement	Refer to JRMP Section 8 Enforcement Response Plan. This is an ongoing and budgeted JRMP activity. The City continues to implement escalating enforcement responses to compel with statutes, ordinances, permits, contracts, orders, and other requirements for IDDE, development planning, construction management, and existing development in accordance with the City's Enforcement Response Plan. The City implements a three level approach for escalating enforcement of storm water violations that include Level 1: Verbal or Written Warnings; Level 2: Administrative Citations; and Level 3: Civil or Criminal Prosecutions.	Jurisdictional	FY16	Continuous-Ongoing	X	X	X	X	X	X	Various	Env Division, Code Enforcement, City Attorney	
<b>E.7 Public Education and Participation (B.3.b.(1)(a)(iii))</b>														
IB-43	Implement a public education and participation program.	Refer to JRMP Section 9. This is an ongoing and budgeted JRMP activity that implements a public education and participation program to promote and encourage development of programs, management practices, and behaviors that reduce the discharge of pollutants in storm water prioritized by high-risk behaviors, pollutants of concern, and targeted audiences. Specific targeted education BMP activities are described below and in detail in JRMP Section 9.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	Various	Env Division	

**Table I.7.1 City of Imperial Beach  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed						Source (B.3.b.(1)(a)(i))  Med to High WQIP priority sources	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow		
IB-44	Provide education opportunities to development community	Refer to JRMP Section 9. This is an ongoing and budgeted JRMP activity that targets the development community. Contractors and developers receive multiple opportunities on storm water education through face-to-face meetings with the Community Development and Public Works Departments during the permitting process, through onsite inspections, and through investigations of illegal discharges. Education brochures are used during the permitting process and during enforcement actions, and web resources are available. The use of LID features in the design of projects is a key water quality improvement strategy that the City encourages for every project. Contracts are also constantly reminded of their responsibility to provide erosion and sediment control on the project site and preventing the discharge of any liquid or material.	Jurisdictional	Prior to FY16	Continuous-Ongoing				X	X	X	Land Development	Env Division, Community Development, Public Works

**Table I.7.1 City of Imperial Beach  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source (B.3.b.(1)(a)(i))  Med to High WQIP priority sources	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/ Wildlife		
IB-45	Provide education opportunities to municipal departments and personnel	Refer to JRMP Section 9. This is an ongoing and budgeted JRMP activity that targets education of City staff. The Environmental Division provides multiple education opportunities to train municipal staff on the various elements of the storm water management program. Every City employee is trained to identify and report illegal storm water discharges and to implement the proper storm water BMPs during work activities. City staff is also expected to provide superior customer service to the public, which includes providing education on storm water issues. Annual training is provided to the Public Works department to review BMPs and changes to the storm water management program. Storm water management is also a standing issue that gets discussed through multiple interdepartmental meetings which include: monthly code enforcement meetings, weekly development planning meetings, weekly staff meetings, and part of every new employee orientation program.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	Municipal activities, Existing Development	Citywide	
IB-46	Provide education opportunities to commercial businesses	Refer to JRMP Section 9. This is an ongoing and budgeted JRMP activity to target the Imperial Beach businesses community on storm water management. The City provides multiple education opportunities to the local business community which includes: providing a commercial business BMP education brochures during the business license application and annual license renewal, providing education through onsite commercial inspections (IB-20), providing education through IDDE enforcement cases (IB-42), and proving storm water presentations to community groups that include Kiwanis Club and Imperial Beach Chamber of Commerce.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	Commercial areas	Env Division	

**Table I.7.1 City of Imperial Beach  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source (B.3.b.(1)(a)(i))  Med to High WQIP priority sources	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/ Wildlife		
IB-47	Provide education opportunities to residents, general public, and school children	Refer to JRMP Section 9. This is an ongoing and budgeted JRMP activity to provide storm water education to residents, general public, and school children. Educational information on storm water BMPs is provided on the City's website, through the EDCO quarterly newsletter mailed to residents, printed materials provided at City offices, through community presentations, community events, regional events, through partnerships with NGOs, and various other methods.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	Residential areas	Env Division	
IB-47a	Support ILACSD watershed presentations to school children as part of the San Diego Bay WMA educational activity	This is a new and ongoing activity that the City is participating in with the San Diego Bay Copermittees in partnership with ILACSD to target annual storm water education presentations to school children. Educational messaging is reviewed annually with ILACSD and customized for the target age group and priority condition and pollutant.	Jurisdictional	FY16	Continuous-Ongoing	X			X		X	Variable	Env Division, San Diego Bay WMA	
IB-47c	Support public participation through community cleanup events	This is a new and ongoing activity to partner in region wide cleanup events to support WMA collaboration. The City supports the annual Creek to Bay and Coastal Cleanup Day. The City also hosts the annual Home Front Cleanup event (IB-26) for Imperial Beach residents. These events raise public awareness on watershed issues and help activate the public to cleanup illegally dumped trash.	Jurisdictional	FY16	Continuous-Ongoing	X			X			Illegal dumping	Env Division, Tijuana River WMA, San Diego Bay WMA	
IB-47d	Support the Education and Residential Sources workgroup activities with the San Diego Copermittees	This is an ongoing activity with the San Diego Copermittees to implement a regional education program to more effectively provide regional messaging on priority pollutants. Efforts include community based social marketing surveys, targeted messaging through various media, and storm water education at community events. Bacteria, trash, and eliminating dry weather flow are the priority target pollutants.	Jurisdictional	FY16	Continuous-Ongoing	X			X		X	Variable	Env Division, San Diego Bay WMA, Tijuana River WMA	

**Table I.7.1 City of Imperial Beach  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source (B.3.b.(1)(a)(i))  Med to High WQIP priority sources	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/ Wildlife		
IB-48	Provide education opportunities to the underserved community	Refer to JRMP Section 9. This is an ongoing and budgeted JRMP activity that ensures educational opportunities are available for both Spanish speaking and lower income residents. The Environmental Division incorporates the underserved community in most educational activities, which is particularly important to the lower income and Spanish speaking community in Imperial Beach. Preventing the discharge of trash and sediment and eliminating dry weather flows are important messages that are shared to the underserved community through community events, in partnerships with NGOs, through school presentations, and a focus of enforcement actions.	Jurisdictional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	Residential areas	Env Division	
<b>Non-JRMP Strategies (Optional Strategies, B.3.b.(1)(b))</b>														
<b>Nonstructural</b>														
IB-02	Proactive enforcement of storm water violations and WQIP priority pollutants that enhance baseline IDDE Program efforts	This is a new and budgeted JRMP activity to target WQIP priorities. This activity involves the proactive identification of storm water violations with an emphasis on WQIP priorities of sediment and trash through targeted monthly neighborhood inspections outlined in IB-21. Frequency includes once per week dry-by inspections that cover all sources in each neighborhood section. Minimum BMPs are provided in Attachment 2 and Attachment 3 with specific attention made to priority sources.	Optional	FY16	Ongoing through Permit term	X			X	X		Illegal dumping, poorly maintained residential areas, active construction, commercial areas	Env Division	

Table I.7.1 City of Imperial Beach  
 Jurisdictional Strategies (continued)

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source (B.3.b.(1)(a)(i))  Med to High WQIP priority sources	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/ Wildlife		
IB-04b	MS4 outfall inspection and maintenance program (non-major non-jurisdictional outfalls)	This is a new and budgeted JRMP activity to visually inspect all MS4 outfalls annually (including non-major MS4 outfalls, Caltrans, Navy, and TRNERR) to support IDDE efforts and to identify maintenance needs. Frequency of inspection and any maintenance work is once per year for each outfall. Minimum BMPs include cleanup of any trash and debris at outfall locations post field screening and schedule appropriate follow up maintenance for any scour pond, sedimentation, or vegetation removal. All maintenance activities adjacent to TJ Estuary or SD Bay must be coordinated with FWS and/or TRNERR and performed outside of bird nesting season. Inspections and maintenance activity on Navy property must be coordinated through Navy Public Affairs Liaison.	Optional	FY16	Continuous-Ongoing	X	X	X	X	X	X	MS4s	Env Division, Caltrans, Navy, TRNERR, FWS	
IB-13	Implement retrofit of impervious areas, LIDs, and EPA Green Streets guidance in the design phase for Capital Improvement Projects	This is a new and budgeted JRMP activity to consider the retrofit of impervious areas during the initial design phase of CIPs. The City will consider retrofit of impervious areas, LIDs, and EPA Green Streets guidance with the City Engineer in the design phase for all CIPs where feasible, supported by City Council, or required by Priority Development status.	Optional	FY16	Continuous-Ongoing	X	X	X	X	X		Streets, Municipal areas, Parks	Public Works, City Engineer	

**Table I.7.1 City of Imperial Beach  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source (B.3.b.(1)(a)(i))  Med to High WQIP priority sources	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/ Wildlife		
IB-21	Neighborhood inspection program	This is a new and budgeted JRMP activity to that allows for focused and targeted inspections by the Environmental Division that are informed by WQIP priorities. Frequency includes once per week dry-by inspections that cover all sources in each neighborhood (residential areas, commercial facilities, and active construction). The City is divided into 6 neighborhoods areas that rotate in priority each month as identified in JRMP Section 7. Minimum BMPs are provided in Attachment 2 and Attachment 3 with specific attention made to the highest priority pollutant of trash and sediment. Program will be evaluated at the end of Permit term for effectiveness.	Optional	FY16	Ongoing through Permit term	X	X	X	X	X	X	Residential, Commercial, active construction	Env Division	
IB-25	Collection of illegally dumped material in alleys and public right-of-way	This is an enhanced and budgeted JRMP activity that allows for focused and targeted collection of trash generated by illegal dumping in the public right-of-way and City alleys. Illegally dumped materials observed by City staff or reported by the public in City alleys get inventoried and cleaned up weekly every Thursday by EDCO. Illegally dumped material observed or reported in the public right-of-way get collected at the end of the day by Public Works crew.	Optional	FY16	Continuous-Ongoing	X			X			Residential, Commercial, Alleys	Env Division	
IB-26	Home front cleanup event (Incentive Program)	This is an ongoing and budgeted JRMP activity. This free event is an incentive for IB residents and provides a convenient opportunity to dispose or recycle large bulky items or green waste. The City partners with EDCO for this important community activity that also provides an opportunity to dispose e-waste, shred important documents, pickup free mulch for ground cover, and provide education materials. The event occurs annually on the first Saturday in May.	Optional	Prior to FY16	Continuous-Ongoing	X			X	X		Illegal Dumping, Residential	Env Division, EDCO	

**Table I.7.1 City of Imperial Beach  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed						Source (B.3.b.(1)(a)(i))  Med to High WQIP priority sources	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow		
IB-27	Pet waste bag program (Incentive Program)	This is an ongoing and budgeted JRMP activity. The City currently maintains 10 pet waste bag dispensers twice per week. The City would like a local community group or non-profit to manage the pet waste bag program, which was previously run by a local group from 1999-2013 and supported through the City's community grant program. The City will continue to implement the pet waste bag program until a community group is identified to take back over the program. The pet waste bag program is important to residents and also helps control a known bacterial source.	Optional	Prior to FY16	Continuous-As needed	X						Pet waste	Public Works
IB-62	EDCO Community Grant Program (Incentive Program)	This is an ongoing and budgeted activity. The City partners with EDCO to provide \$5,000 in local community grants per year to local organizations to help improve the community. Examples of include support for a community let pet waste bag program, support for education and outreach through local NGOs, and programs that encourage community involvement. City Council review grant applications and present the grant awards.	Optional	Prior to FY16	Continuous-As needed	X	X		X		X	Various	City Council, EDCO

**Table I.7.1 City of Imperial Beach  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year  (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule  (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source  (B.3.b.(1)(a)(i))  Med to High WQIP priority sources	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/ Wildlife		
IB-64	Cal American Water Rebate Programs (Incentive Program)	<p>Cal American provides drinking water to the City and also offers rebate programs for water conservation efforts including turf replacements and LID gardens for residents. The City also partners with Cal American and independently funds local community groups (Boy Scouts Eagle Projects) to install local turf replacement projects on City property. Recent projects include:</p> <ul style="list-style-type: none"> <li>• City Hall xeriscape (2010)</li> <li>• Marina Vista Center (2010)</li> <li>• Sewer Pump Station 8 (2011)</li> <li>• Elm Ave Planters (2013)</li> <li>• Safety Center Planters (2013)</li> <li>• Public Works xeriscape (2015)</li> <li>• Sports Park planters (2015)</li> <li>• Sheriff's Station City Hall (2015)</li> <li>• Triangle Park (2015- under design)</li> </ul>	Optional	Prior to FY16	Continuous-As needed	X	X				X		Ornamental landscapes	Public Works, Cal American

**Table I.7.1 City of Imperial Beach  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed						Source (B.3.b.(1)(a)(i))  Med to High WQIP priority sources	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow		
	<b>Structural</b>												
	<b>Green Infrastructure</b>												
IB-53	Implement improvements to dirt alleys in the City	This is a new and partially budgeted activity to make improvements to the approximate 2 miles of unimproved dirt alleys in the City that contribute sediment and other storm water pollutants during rain events. The City budgeted for FY 16 to complete the design and construction for the first phase of alley improvements for 14 alley segments (over 1 mile of dirt alleys) that target the highest priority areas in the City. These new alleys will include permeable pavers and storm water retention to provide additional water quality benefit. The second phase of the alley improvements to pave the last remaining dirt alleys is unfunded but is considered a priority by the community. The availability of future grant funds, the establishment of an assessment district, or similar funding mechanisms could trigger the second phase of this project to occur sooner. Otherwise the improvement of the remaining dirt alleys will be improved incrementally over time as funding becomes available. This activity specifically targets the highest priority pollutant of sediment during wet weather in the Tijuana River WMA. This project also targets trash in the San Diego Bay WMA because the City takes over ownership and maintenance of the alleys (IB-24, IB-25) once an alley is improved.	Optional	FY16-FY28	Phase 1 to be complete by FY17; Phase 2 unfunded with a JRMP goal to be complete by FY28	X			X	X		Unimproved alleys	Public Works, Community Development

**Table I.7.1 City of Imperial Beach  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed						Source (B.3.b.(1)(a)(i))  Med to High WQIP priority sources	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow		
IB-58	Implement the Bikeway Village redevelopment project on 13 <sup>th</sup> Street and Bayshore Bikeway	This is a new and budgeted public private partnership to redevelop existing industrial warehouses adjacent to the Bayshore Bikeway on 13 <sup>th</sup> Street. This project includes a new storm water bioswale and wildlife habitat restoration as part of the new development. In addition, the City is providing bikeway and pedestrian improvements along 13 <sup>th</sup> Street. The City is providing funds towards biking and pedestrian improvements and supporting the Bikeway Village redevelopment project. The project is already designed and the City has dedicated funding for its share of the project. Triggers include meeting Coastal Commission conditions, securing permitting for project, implementing a successful partnership with the developer, and phasing of multiple elements of this project. The benefits of the project include increasing public access to the Bayshore Bikeway, enhanced wildlife viewing of south San Diego Bay, improved storm water treatment from older industrial warehouses, and improved biking and pedestrian safety on 13 <sup>th</sup> Street.	Optional	FY16 – FY22	13 <sup>th</sup> Street improvements start FY16 and continue until complete.	X			X	X	X	Commercial area; streets and roads	Public Works, Public-Private Partnership

**Table I.7.1 City of Imperial Beach  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed						Source (B.3.b.(1)(a)(i))  Med to High WQIP priority sources	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow		
IB-61	Palm Ave (Hwy 75) Master Plan	This is a new and partially budgeted activity to redevelop the Hwy 75 commercial corridor along Palm Ave. The City has funded with the support of a grant the first phase of the project to hold a series of community and city council workshops and develop design options. The grant includes preliminary designs sufficient for environmental review. Goals of the project are to enhance safety and to encourage new commercial redevelopment in the area. The project also proposes LID facilities similar to the Eco Bike Route. Potential triggers on the project include design limitations from Caltrans and the possible relinquishment of Hwy 75, community and council support, availability of grant funds for the next project phase, and regional support for the project. If successful, the project will implement green streets along Palm Ave and provide a water quality benefit to the San Diego Bay WMA. A secondary benefit would also come from the redevelopment of the older commercial buildings along Hwy 75.	Optional	FY16 – FY26+	FY16 Council will decide on relinquishment of Hwy 75; FY17 30% designs will be complete; future funding and development schedule TBD (FY26+)	X	X	X	X	X	X	Commercial area;	Public Works, Community Development,

**Table I.7.1 City of Imperial Beach  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source (B.3.b.(1)(a)(i))  Med to High WQIP priority sources	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/ Wildlife		
IB-65	Imperial Beach Green Streets Program	This is a new and budgeted activity in the City's JRMP program to implement EPA Green Streets guidance and LIDs into the design of CIP projects where feasible. See Strategy IB-13 and IB-13. The City Engineer will consider the retrofit of existing impervious areas through the CIP program and consider options to include LIDs and EPA Green Street guidance into the initial design of projects. Green streets and pollutant source control measures will be included into new CIP projects where feasible given the following triggers: the availability of funds, support from the community, support from City council, where it fits within the scope of the CIP project, and where otherwise required to meet WQIP goals. The City is committed to implementing water quality improvement BMPs for CIP projects that achieve multiple benefits.	Optional	FY16-FY28+	Continuous-Ongoing	X	X	X	X	X	X	Streets, City Facilities, Parks, Existing development	Public Works, City Engineer	
<b>Multiuse Treatment Area</b>														
<b>Infiltration and Detention Basins</b>														
<b>Stream, Channel and Habitat Rehabilitation Projects (B.3.b.(1)(b)(iii))</b>														
IB-69	Implementation of stream channel and habitat rehabilitation projects	This is an ongoing and budgeted activity for the following strategies: IB-12, IB-34b, IB-38, IB-54, and IB-58. The City actively seeks projects to retrofit the MS4 system to provide natural treatment of storm water and provide rehabilitation of native habitat. Additional stream channel and habitat restoration projects are contingent upon existing partnerships in the watershed moving specific projects forward based on priorities in the region including triggers for not meeting WQIP priority conditions. The City also partners with local, state, and federal agencies on wetland restoration projects for south San Diego Bay.	Optional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	Variable	Public Works, FWS, RWQCB, NGOs, Port of San Diego, Airport Authority, South Bay Union School District	

**Table I.7.1 City of Imperial Beach  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source (B.3.b.(1)(a)(i))  Med to High WQIP priority sources	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/ Wildlife		
<b>Water Quality Improvement BMPs</b>														
<b>Source Control and LID BMPs</b>														
IB-05a	Provide enhanced storm water BMP conditions for non-PDP (Standard Development Projects) with improvement valuation greater than \$50,000	This is an ongoing and budgeted activity that provides a 2-step review process to provide enhanced storm water BMP conditions for Standard Development Projects with an improvement valuation greater than \$50,000. Applicable projects require an additional review by the Public Works Department for public improvements that include specific project conditions for storm water. BMP conditions typically include at a minimum the disconnection of impervious areas, 12-inches of loamy soil improvement for landscaped areas, designated trash storage area, and LIDs where feasible.	Optional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X		Land Development, Residential, Commercial areas	Public Works, Community Development
IB-39	Eliminate residential and commercial curb cuts	This is an ongoing and budgeted JRMP activity to eliminate curb cuts from residential and commercial areas from older development projects. Curb cuts are eliminated through either permit conditions on new development or when the City has a designated street improvement CIP adjacent to the property. Storm water is required to be directed to landscaped areas.	Optional	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X		Residential, Commercial	Public Works

**Table I.7.1 City of Imperial Beach  
 Jurisdictional Strategies (continued)**

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						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/ Wildlife		
IB-63	Implement full trash capture or equivalent for H-outfall drainage basin	This is an ongoing and partially budgeted activity to provide full trash capture for the H-outfall drainage basin that discharges to the San Diego Bay WMA. H-outfall is the City's primary drainage basin to the San Diego Bay WMA and includes commercial areas, residential land uses, and runoff from Hwy 75. Triggers include completion of a Trash Capture Study to determine the most effective BMPs to implement that both prevents the discharge of trash and mitigates flooding issues for low laying areas. Funds are budgeted for FY16 to complete an initial feasibility study.	Optional	FY16 – FY28	FY16 complete feasibility study; FY17 review analysis with San Diego Bay WMA; FY18 – FY28 add to CIP list or implement equivalent full capture plan				X				Commercial, Residential, Streets	Public Works
	<b>Proprietary BMPs</b>													
	<b>Dry Weather Flow Separation and Treatment Projects</b>													
	<b>WMA Strategies (Optional Strategies, B.3.b.(2))</b>													
IB-12	Offsite Alternative Compliance Program and Watershed Management Area Analysis (WMAA)	This is a new and ongoing activity that the City is participating in with the Regional Copermittees and in each WMA. Funding and resources are budgeted to develop of a regional WMAA and an alternative compliance program framework that needs to be approved by the RWQCB. The implantation of an offsite alternative compliance program at a jurisdictional, watershed, or regional level will be evaluated as the program develops and supported by City Council. The WMAA provides alternative compliance methods in lieu of meeting structural BMP design standards and hydromodification management criteria for new development projects.	Optional	FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Variable	Env Division, Copermittees, RWQCB

**Table I.7.1 City of Imperial Beach  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source (B.3.b.(1)(a)(i))  Med to High WQIP priority sources	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/ Wildlife		
IB-43b	San Diego Bay Watershed Education Programs	This is an ongoing collaborative activity that the City is participating with other Copermittees to support the efforts to address trash, sediment, and water quality issues in the San Diego Bay WMA through education activities. See strategies IB-47a, IB-47c, and IB-47d.	Jurisdictional	FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Variable	Env Division, Copermittees, SD Bay WMA
IB-54	Implement wetland restoration, habitat restoration, and public access improvements along San Diego Bay to support multiple benefits in the San Diego Bay WMA through public private-partnerships and partnerships with other state, federal, and local agencies	This is an ongoing and partially budgeted activity that includes multiple development projects and restoration projects along San Diego Bay. The City's Bikeway Access Project (IB-34b) is the City's portion of the larger FWS Birder's Point project to build a walking trail and overlook observation decks to view the recently completed Salt Pond wetland restoration projects. The City is also supportive of the ongoing and planned restoration projects in San Diego Bay and the Otay River flood channel (IB-38). The City's public-private partnership with the Bikeway Village Project at the end of 13 <sup>th</sup> Street (IB-58) also builds upon the successful restoration efforts along San Diego Bay for eco-tourism. The Port of San Diego's recent decision in 2015 to turn Pond 20 into a new wetland mitigation bank also provides a new opportunity for collaborate that will evolve over the Permit term. The successful implementation of projects from partnerships in San Diego Bay WMA will likely result in additional water quality improvement strategies being added to this list.	Optional	FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Variable	Public Works, San Diego Bay WMA, FWS, SANDAG

**Table I.7.1 City of Imperial Beach  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source (B.3.b.(1)(a)(i))  Med to High WQIP priority sources	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/ Wildlife		
IB-56	Update the SCCOOS Tijuana River Plume Tracking model	This is an ongoing collaborative activity that the City is partnering with Scripps and other agencies to better understand the science on how pollution transport from Mexico is impacting beach water quality from Imperial Beach to Coronado. Scripps will be performing a pollution transport study in Fall 2015 to track the northward mixing of near shore and offshore currents that can then be used to update the existing SCOOS plume tracking model currently used by the IB Lifeguards and County DEH to protect public health. Funding is still needed to update the plume tracking model with the pending results of the 2015 Scripps study. Understanding the transport of pollution from the known point sources of the Tijuana River, IBWC ocean outfall, Punta Bandera, and other sources in Mexico will allow the County DEH to more effectively respond to water quality conditions and help prioritize actions that will support the collaborative efforts in IB-55.	Optional	FY16	Continuous-Ongoing	X					X		Variable	Env Division, IB Lifeguards, Scripps, RWQCB, County DEH

**Table I.7.1 City of Imperial Beach  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed						Source (B.3.b.(1)(a)(i))  Med to High WQIP priority sources	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow		
IB-60	Support development of rapid bacteria testing for beach water quality monitoring	This is a new and ongoing collaborative activity in the region to develop rapid beach water quality testing to allow for more accurate and effective response to protect beach water quality. The development of rapid monitoring methods are currently being developed by SCCWRP and evaluated by the County DEH for implementation along San Diego County beaches. Imperial Beach is an ideal location to test pilot rapid qPCR bacteria monitoring if the method proves successful. Triggers include development of qPCR method, availability of funding, and support from County DEH. Rapid response to beach water quality could allow for quicker response to water quality issues along Imperial Beach and also raise public awareness on the complex cross border water quality issues.	Optional	FY16	Continuous-Ongoing	X						Beach water Quality	Env Division, IB Lifeguards, County DEH, SCCWRP, RWQCB
IB-66	San Diego Bay Trash Study	The City of Imperial Beach is participating in the San Diego Bay Trash Study with WMA Copermittees. The study will assess targeted geographic areas and include (1) an assessment of current conditions to provide a baseline to demonstrate progress, (2) identify high-priority areas for targeted strategy implementation, and (3) identification of potentially collaborative efforts with different jurisdictions.	Optional	Prior to FY16 – FY19	Continuous-through Permit term				X			Various	Env Division, San Diego Bay WMA, SCCWRP
IB-67	Special Study: Participation in the San Diego Regional Reference Stream Study	This is an ongoing and budgeted collaborative activity with the San Diego Copermittees to develop numeric targets for minimally disturbed or “reference” condition for bacteria and other pollutants.	Optional	Prior to FY16 – FY17	Continuous-through Permit term	X	X					Various	Regional Copermittees, SCCWRP

**Table I.7.1 City of Imperial Beach  
 Jurisdictional Strategies (continued)**

ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed							Source (B.3.b.(1)(a)(i))  Med to High WQIP priority sources	Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))	
						Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/ Wildlife			
IB-68	Support regional effort to address trash and other water quality issues from homeless encampments	This activity is currently not developed or funded. If a regional social services effort is established then the City will support the effort to provide sanitation and trash management for persons experiencing homelessness and determine if the program is suitable and appropriate for Imperial Beach. Triggers include the establishment of a regional effort to address homelessness, city council support, availability of funds or staff resources, and community support.	Optional	Triggered	This activity is a concept developed through the WQIP process	X			X				X	Homeless encampments, illegal dumping	Env Division, Public Safety, Regional Copermittees

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## ***Imperial Beach Public Works Best Management Practices for Municipal Facilities and Activities***

In accordance with the Municipal Storm Water Permit, the City of Imperial Beach has developed an inventory of municipal activities and facilities, and associated best management practices (BMPs) that reduce pollutants to the maximum extent practical. The following document is a guide for Public Works employees on how to implement activity-specific BMPs to adequately manage urban runoff and the potential release of pollutants from municipal facilities and day-to-day operations. For clarification or additional information not covered in this fact sheet please contact the Environmental Division or the most recent Jurisdictional Runoff Management Program (JRMP).

Municipal facilities and activities in Imperial Beach include the following:

1. Roads, Streets, and Alley and Maintenance;
2. Municipal Separate Storm Sewer System (MS4) and Sewer Maintenance;
3. Parking Facilities;
4. Public Works Yard, Storage of Materials and Equipment, Solid Waste Management, and Vehicle and Equipment Maintenance;
5. Parks and Other Landscape and Recreation Facilities and Maintenance;
6. Public Buildings and Maintenance;
7. Other (Graffiti, Pier, and Waterfront Maintenance)

The Best Management Practices (BMPs) described in this guide and presented in Table I.7.2, provide a summary of the required pollution prevention methods for all Public Works employees for municipal areas and work related activities. The BMPs are organized under the following general topics:

- General Information on Best Management Practices (BMPs)
- Parks and Landscaping BMPs
- Materials Handling BMPs
- Construction, Maintenance, and Repair BMPs

### **General Information on Best Management Practices (BMPs)**

1. Good Housekeeping  
Good housekeeping practices are designed to maintain a clean and orderly work environment. A clean work environment reduces the chance of accidental spills caused by the mishandling of materials and equipment and reduces the safety hazards in the facility and to personnel. Good housekeeping measures will be implemented in an effort to prevent pollutants from entering storm water discharges.

- Employees are informed of activities that could potentially contribute pollutants to storm water and required to implement good pollution prevention methods while conducting these activities.
- Good housekeeping will be maintained at all municipal facilities and put into practice while conducting work. Public Work employees are vital in maintaining the functions and aesthetics of the City. Public Work employees are held to a higher standard of performance and are expected to set an example to the public through implementing best management and pollution prevention practices.

## 2. Employee Training

Employees will receive annual training on the components and goals of the City's Jurisdictional Runoff Management Program (JRMP). The training program will create an overall sensitivity to pollution prevention concerns. Open discussions on urban runoff related topics are also encouraged to further the importance and enhance the program. In addition, the effectiveness of the training program will be routinely evaluated through surveys and/or pre and post tests in order to verify that the information was presented effectively. The training program may consist of both formal and informal training. Training tools included in the training program may include the following:

- Employee guide books
- Films and slide presentations
- Drills
- Meetings
- Emails, bulletin boards, and newsletters
- Environmental excellent awards

## 3. Visual Inspections

Designated personnel will conduct inspections of municipal facilities and storm water conveyance systems. These individuals will report inspection results to the Environmental Division to ensure that any deficiencies are addressed and inspections documented.

## 4. Improved Operation and Maintenance

The City will establish proper operation and maintenance practices for equipment and job related activities. Such practices ensure processes and equipment work well and result in the reduction of materials entering the environment. The City will review current maintenance activities, evaluate if the maintenance efforts can directly or indirectly contribute pollutants to receiving waters, revise procedures or adopt additional BMPs as necessary to reduce the contribution of pollutants to

receiving waters during maintenance activities, and educate employees on revised procedures.

5. Waste Disposal and Recycling

Waste disposal areas will be kept free of litter and debris. Waste receptacles will have a cover or lid to prevent the contents from being dispersed by the wind or coming in contact with storm water. All hazardous material wastes such as batteries, solvents, waste oil and anti-freeze will be stored in a covered area that prevents contact with storm water. Practices that minimize waste and the proper disposal of recyclable materials (including green waste) will be implemented by all employees.

6. Preventative Maintenance

Onsite equipment will be maintained in good working condition. The preventive maintenance program will include regular inspections and testing of facility equipment. The storm water preventive maintenance program and BMPs shall expand upon the current preventive maintenance program to include storm water considerations.

7. Reporting and Record Keeping

Record keeping systems will be established to document housekeeping and preventive maintenance inspections, and training activities. All housekeeping and preventive maintenance inspections will be documented and records maintained for one year past the duration of the Permit. Inspection documentation will contain at the minimum the following information:

- Date and time of inspection
- Name of inspector
- Items inspected
- Problems noted
- Corrective Actions

## **Parks and Landscaping BMPs**

1. Facility and Grounds Maintenance

The implementation of best management practices for parks, parking lots, and other landscaped or recreation facilities is designed to prevent pollutants from these areas from entering storm water conveyance systems. Litter and debris are collected and disposed of properly. All paved surfaces will be swept if necessary and the waste collected and disposed of properly. All storm drain inlets, culverts and conveyance systems will be kept clean and free from debris. All maintenance activities will prevent the discharge of water into the street, curb, or storm drain system (MS4) and implement the appropriate pollution prevention methods.

2. Irrigation Control

The City will periodically inspect irrigation facilities to ensure that only the necessary amount of water is being applied to landscaping. Over-watering can lead to increased storm water runoff containing fertilizer, pesticide, and pet waste pollutants.

3. Green Waste

Landscape waste consists of clippings, cuttings and droppings of leafy and woody materials. Proper disposal procedures will be implemented, where applicable, to assure that exposed materials and accumulated trimmings and litter will be disposed of properly and not get into the storm drain system. All green waste will be properly disposed in the City's green waste bin and recycled. Any temporary stockpile of material also needs to be stored away from watercourses, in addition to being bermed and covered.

4. Native Vegetation

The use of native vegetation will be implemented, where applicable, to reduce water, fertilizer and pesticide needs. The following procedures will be considered in deciding the type of vegetation for landscaped areas:

- Determine existing native vegetation features (location, species, size, function, and importance) and consider the feasibility of protecting them.
- Consider elements such as their effect on drainage and erosion, hardiness, maintenance requirements, and possible conflicts between preserving vegetation and the resulting maintenance needs.
- Where feasible, retain and/or plant selected native vegetation whose features are determined to be beneficial.

5. Mulch Use

Mulch should be used to retain soil moisture and reduce the amount of irrigation. Mulch also needs to be placed in a manner that prevents its translocation into the storm drain system or natural waterways.

6. Pesticides, Herbicides, and Fertilizer Application and Handling (Integrated Pest Management)

The Federal Pesticide, Fungicide, and Rodenticide Act and California Title 3, Division 6, Pesticides and Pest Control Operations place strict controls over pesticide application and handling and specify training, annual refresher, and testing requirements. The regulations generally cover: a list of approved pesticides and selected uses, updated regularly; general application information; equipment use and maintenance procedures; and record keeping. The California Department of Pesticide Regulations and the County Agricultural Commission coordinate and maintain the licensing and certification programs. All City employees who apply pesticides and herbicides in "agricultural use" areas such as parks, rights-of-way, and recreation areas will be properly certified in accordance with state regulations. Contracts for landscape maintenance will

include similar requirements. The City will implement integrated pest management practices, provided in Table I.7.3, and consider specific alternative products in lieu of pesticides to control insects, fungi and weeds: Certain insects, such as lacewing and ladybugs, can be used against unwanted pests. Compost and soil amendments can be used as natural alternatives to fertilizers

## **Materials Handling BMPs**

### **1. Spill Prevention and Response**

Spills and leaks are one of the largest contributors of storm water pollutants. Employees need to be educated on spill prevention and response procedures that identify potential spill areas, specific material handling procedures, descriptions of spill response procedures, and spill clean-up equipment. Employees are expected to be able to identify and characterize potential spills, eliminate and reduce spill potential, and respond to spills when they occur in an effort to prevent pollutants from entering the storm water drainage system.

### **2. Material Inventory Procedures**

Site personnel will maintain an up-to-date inventory of all hazardous and non-hazardous materials used at the facility. Chemicals used at the facility will be handled with adequate precaution. Hazardous and toxic materials used at the site will be identified, quantified, and managed in compliance with federal, state, and local regulations. In addition, materials will be recycled, reclaimed, and/or reused to reduce the volume of materials brought into the facility when possible, and less or non-toxic materials will be substituted for toxic materials.

### **3. Material Storage Practices**

Hazardous waste and materials used will be properly identified, handled, and stored; and instructions shall be given to all site personnel. Improper storage of these materials can result in accidental spills and the release of materials. All aboveground storage tanks will be designed and managed in accordance with applicable regulations, identified as a potential pollution source, and have secondary containment installed, such as a berm or dike with an impervious surface.

### **4. Storage Tanks and Containers**

Accidental releases of chemicals from storage tanks and containers can contaminate storm water with many different pollutants. Materials spilled, leaked, or lost from storage tanks may accumulate in soils or on other surfaces and be carried away by rainfall runoff. All specific standards set by Federal and State laws concerning the storage of oil and hazardous materials will be met. Employees will be well trained to reduce human errors that lead to accidental releases or spills. Regular inspections of the integrity of all containers (i.e. tanks, drums, paint cans) will be performed. All tanks, containers, and drum storage areas, whether permanent or temporary, will have a secondary containment system.

5. Outside Storage

Raw materials, by-products, finished products, containers, and other materials stored in areas exposed to rain and/or runoff can pollute storm water. Storm water can become contaminated by a wide range of pollutants when solid or liquid materials wash off or dissolve into the storm water, or when containers spill or leak. If feasible, outside storage areas will be covered with a roof, and bermed, or enclosed to prevent storm water contact. Where overhead coverage is unavailable, a temporary waterproof covering will be used over potential pollutants stored outside. All potential pollutants stored outside will have some type of secondary containment system in case of spills or leaks.

6. Loading and Unloading Materials

Loading and unloading of materials presents a potential source of pollutants to the storm drain system through lazy or careless behavior. Materials spilled, leaked, or lost during loading and unloading may collect in the soil or on other surfaces and be carried away by rainfall, runoff, wind, or when the area is cleaned. Rainfall may wash off pollutants from machinery used to unload or load materials contributing oil and grease to the storm drain system. Apply appropriate management practices when handling, loading, or unloading materials.

**Construction, Maintenance, and Repair BMPs**

1. Sediment and Erosion Control

The majority of sites are paved or have other surfaces resistant to erosion. Any unpaved areas will be inspected for the potential for erosion and managed to prevent erosion. Should erosion affect on-site storm water management systems, remedial action will be taken to stop the erosion. This could involve planting vegetation, installing silt screens or waddles, or patching or repaving deteriorated paved surfaces. If construction activity occurs on site, sediment and erosion control will be implemented and monitored as is required for all construction projects.

2. Street and Parking Lot Sweeping

Street sweeping is widely recognized as an effective method of reducing the amount of pollutants (litter, green waste, oils and grease, and sediment) on street surfaces that may impact storm water. Parking facilities will be cleaned on a regular basis to prevent accumulated wastes and pollutants from being discharged into conveyance systems during rainy conditions. For municipal parking facilities not swept by EDCO street sweeping, Public Works employees will routinely clean the area. If possible, dry cleaning methods will be used to prevent the discharge of pollutants into the storm water conveyance system. Sweeping or vacuuming the parking facility will be encouraged over any other method. If water is used to clean a parking facility the rinsate will not be allowed to enter any storm water conveyance systems or receiving waters. Wash water will be directed toward the sanitary sewer or collected and discharged to a

pervious surface. Storm drains will be sealed with an impervious material before washing begins.

3. Vegetation Control

The objective of this BMP is to minimize the amount of material that might potentially reach the storm water conveyance system due to mechanical vegetation control measures. Mechanical vegetation control measures include, mowing grass, brush and tree trimming, and the application of herbicides. Vegetation controls are most useful in areas of steep slopes adjacent to roadside channels, or within roadside swales. As a source control BMP, plants that are compatible with semi-arid conditions and native to Southern California will be utilized, thus reducing the amount of trimming and mowing necessary. Roads that do not pose a threat to passing vehicles or pedestrians will be cut less frequently. In addition, hand held cutting tools will be used when possible to more adequately manage the waste and to conduct maintenance at optimal seasonal times.

4. Road, Streets, and Alley Maintenance

Regular maintenance activities for roads and sidewalks may include, filling potholes, construction for sidewalks, grinding activities, and maintenance of drainage channels. To minimize the impact to storm water resulting from the maintenance of these facilities, the following BMPs will be implemented:

- Repair potholes to reduce sediment loss and erosion
- Ensure that all spare filling material on the road is collected
- Conduct maintenance activities during dry weather whenever possible
- Protect drain inlets to reduce sediment or waste from entering the drain during maintenance or construction activities
- Store materials away from conveyance systems
- Utilize temporary washout areas or clean equipment at designated area at the Public Works yard
- Manage concrete cutting and grinding waste properly with vacuum truck
- Inspect maintenance equipment for leaks

5. Facility Repair, Remodeling, and Construction

During maintenance activities manage all materials and equipment in a manner that contains everything onsite. No water or construction material is permitted to leave the designated work area. Protect storm drain inlets and implement appropriate BMPs to prevent the release of sediment and other construction related contaminants. Follow all required construction storm water BMPs and Pollution Prevention Plans.

6. Vehicle and Equipment Maintenance Operations

Many vehicle and equipment maintenance operations use materials or create wastes that are harmful or pose a threat to the environment. Storm water runoff from areas where these activities occur can become polluted by a variety of contaminants. Parked vehicles will be monitored closely for leaks and pans will be placed under any leaks to collect the fluids for proper disposal or recycling. Maintenance activities shall be conducted under covered areas whenever possible. And the use of hazardous materials such as cleaning solvents will be kept to a minimum to make recycling easier and to reduce hazardous waste management cost. Fleet maintenance will clean vehicle parts without using liquid cleaners wherever possible to reduce waste.

7. Vehicle and Equipment Washing

Washing vehicles and equipment outdoors or in areas where wash water flows onto the ground can pollute storm water. Wash water can contain high concentrations of oil and grease, phosphates, metals, and suspended solid. Vehicle wash water is considered a process wastewater and needs to be disposed of properly. The City will use biodegradable, phosphate-free detergents for washing vehicles as appropriate. All washing of vehicles or equipment will be done at the designated Public Works wash bay where waste water is diverted to the sanitary sewer.

**Table I.7.2  
 Public Works Yard Municipal Activities and Best Management Practices**

<b>Activity</b>	<b>Pollutants</b>	<b>Minimum Required Best Management Practices</b>
<b><i>Public Works Yard</i></b>		
Outdoor storage of vehicles and equipment	Oil and Grease Metals	<ol style="list-style-type: none"> <li>1. Hazardous spill containment kit</li> <li>2. Scheduled preventative maintenance</li> <li>3. Proper disposal of waste</li> <li>4. Use of drip pans</li> </ol>
Outdoor vehicle and equipment fueling	Oil and Grease Metals	<ol style="list-style-type: none"> <li>1. Hazardous spill containment kit</li> <li>2. Spill prevention and cleanup practices</li> <li>3. Inspect fuel area daily</li> <li>4. Sweep to clean fueling area</li> </ol>
Outdoor vehicle and equipment wash area	Oil and Grease Metals Sediment MBAS (detergents)	<ol style="list-style-type: none"> <li>1. Wash only in designated area</li> <li>2. Properly dispose of hazardous materials</li> </ol>
Outdoor storage of raw materials	Sediment Metals	<ol style="list-style-type: none"> <li>1. Keep area clean</li> <li>2. Contain materials and protect drainage path (straw waddle for storage bins, and protect storm drain inlet)</li> <li>3. Inspect storage areas</li> </ol>
Outdoor storage of green wastes	Sediment Nutrients Bacteria	<ol style="list-style-type: none"> <li>1. Proper management of solid and liquid wastes</li> <li>2. Inspect storage area</li> <li>3. Store container in a manner that either prevents contact with rainfall and storm water, or contains contaminated runoff for treatment and disposal</li> </ol>
Outdoor storage of solid wastes and recycling materials	Sediment Trash Metals Bacteria	<ol style="list-style-type: none"> <li>1. Keep trash and recycling lids closed</li> <li>2. Proper management of solid, liquid, and recycled wastes</li> <li>3. Sweep to clean</li> </ol>
Storage of hazardous materials	Hazardous Materials	<ol style="list-style-type: none"> <li>1. Store in isolated locked cabinets or storage bins</li> <li>2. Properly store, manage, and dispose of hazardous materials</li> <li>3. Pollution prevention methods</li> </ol>
Outdoor loading and unloading of materials	Sediment Nutrients Metals Bacteria	<ol style="list-style-type: none"> <li>1. Spill prevention and cleanup response</li> <li>2. Inspect unloading ramp</li> <li>3. Keep area clean</li> </ol>

**Table I.7.2  
 Public Works Yard Municipal Activities and Best Management Practices  
 (continued)**

<b>Activity</b>	<b>Pollutants</b>	<b>Minimum Required Best Management Practices</b>
Vehicle and equipment maintenance and repair	Oil and Grease Metals Hazardous Materials	<ol style="list-style-type: none"> <li>1. Conduct maintenance activities inside</li> <li>2. Proper disposal of hazardous materials</li> <li>3. Spill prevention and cleanup practices</li> </ol>
Storage of used oil and antifreeze	Hazardous Materials	<ol style="list-style-type: none"> <li>1. Contain in covered material storage area</li> <li>2. Provide secondary containment</li> <li>3. Recycle used oil and antifreeze</li> </ol>
Cleaning of paint and striping equipment	Metals Paint Hazardous Materials	<ol style="list-style-type: none"> <li>1. Proper disposal of hazardous materials</li> <li>2. Wash only in designated area</li> </ol>
Storage of paint and graffiti removal materials	Metals Paint Hazardous Materials	<ol style="list-style-type: none"> <li>1. Properly store, manage, and dispose of hazardous materials</li> <li>2. Pollution prevention methods</li> </ol>
Good housekeeping practices	Sediment Bacteria Trash	<ol style="list-style-type: none"> <li>1. Properly store, manage, and dispose of hazardous materials, solid, liquid, and recycled waste</li> <li>2. Pollution prevention methods</li> </ol>
Building and grounds maintenance	Nutrients Pesticides and Fertilizers Trash Sediment	<ol style="list-style-type: none"> <li>1. Properly store, manage, and dispose of materials</li> <li>2. Utilize integrated pest management methods</li> <li>3. Pollution and urban runoff prevention methods</li> </ol>
Outdoor storage of landscaping plants and materials	Nutrients Sediment	<ol style="list-style-type: none"> <li>1. Properly contain material storage area</li> <li>2. Prohibit non-storm water discharges</li> </ol>

**Table I.7.3  
 Municipal Best Management Practices (BMPs)  
 for Management of Pesticides, Herbicides, and Fertilizers**

<b>Municipal Area</b>	<b>BMPs currently implemented for handling, applying, storing, and disposing of pesticides, herbicides, and fertilizers</b>	<b>BMPs to be considered to reduce or minimize pesticides, herbicides, and fertilizers from entering the storm drain system</b>
Parks Recreation Areas Medians/Open Spaces Greenways/Open Spaces Civic Areas Athletic Fields Beach Access Trees Landscaping	Apply pesticides and herbicides in accordance with the California Department of Pesticides requirements as applicable, and the City IPMP.	Irrigation Time Check.
	Irrigation System Check for overflows into storm drain and from treated areas into storm drain via streets and gutters (see Caltrans Municipal, E3b - Appendix C).	Use of nonsynthetic fertilizers (Alternative Safer Products).
	Purchase pesticides in small (less than 5-gallon) amounts.	Replace with native vegetation when practical.
	Use manufacturer’s label requirements.	Use insecticidal soaps or horticultural oils if possible.
	Dispose of organic materials in designated containers as solid waste.	
	Mix the right amount of chemical at the right strength to use all of the solution.	
	Dedicate application equipment to minimize the rinsing of containers.	
	Manually remove diseased and dying plants, branches, and leaves.	
	Store fertilizers separate from pesticides and herbicides. Fertilizers are oxidizers that could react with other chemicals.	
	Apply chemicals when public exposure is minimized.	
	Train Municipal, Public Works, and Procurement staff on storm water issues.	

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The minimum Best Management Practices (BMPs) for residential areas and commercial facilities are provided in Table I.7.4.

**Table I.7.4  
 Minimum Storm Water BMPs for Residential Areas and Commercial Facilities**

<b>Storm Water BMP &amp; Description</b>	<b>Residential BMP Implementation</b>	<b>Commercial BMP Implementation</b>
<p><b>Eliminate Illegal Discharges</b>                      Non-storm water discharges (water other than rain) shall not be discharged to the storm water conveyance system. IBMC 8.30.050.A</p>	<p>Non-storm water discharges (any solid or liquid material) other than rain water must be prevented from leaving residential private property and entering the street gutter or any other part of the City’s storm drain conveyance system (limited exemptions apply IBMC 8.30.060). Any illegal discharges should be reported to the City’s storm water hotline 619-424-4095 or reported online.</p>	<p>Commercial businesses must properly dispose of all solids or liquids and prevent the discharge of non-storm water from leaving the commercial property and entering the street gutter or any other part of the City’s storm drain conveyance system. No exemptions apply. Any illegal discharges should be reported to the City’s storm water hotline 619-424-4095 or reported online.</p>
<p><b>Eliminate Illegal Connections</b>                      The establishment of illegal connections to the storm water conveyance system is prohibited even if the connection was established pursuant to a valid city permit. IBMC 8.30.050.B</p>	<p>Illegal connections to the storm water conveyance system are man-made connections from a pipe or channel that convey discharges that are not composed entirely of storm water. Examples include grey water (i.e. laundry rinse water), waste water, sump pumps, curb-cuts, or any other non-NPDES permitted storm water connection. Suspected illegal connections should be reported to the City’s storm water hotline 619-424-4095 or reported online.</p>	<p>Illegal connections to the storm water conveyance system from commercial facilities shall be eliminated. Examples include any pipe or channel that conveys non-storm water discharges directly to the street gutter or any other part of the City’s storm drain system from a commercial property. Suspected illegal connections should be reported to the City’s storm water hotline 619-424-4095 or reported online.</p>

**Table I.7.4**  
**Minimum Storm Water BMPs for Residential Areas and Commercial Facilities (continued)**

<b>Storm Water BMP &amp; Description</b>	<b>Residential BMP Implementation</b>	<b>Commercial BMP Implementation</b>
<p><b>Prevent Illegal Discharges</b>                      Spilling, leaking, or stockpiling any materials or performing any maintenance activities that may result or contribute to the discharge of pollutants is prohibited unless written authorization is provided by the City. IBMC 8.30.050.C</p>	<p>The spilling, leaking, or stockpiling of any material or performing any pollutant generating activity is prohibited unless written authority through an Encroachment Permit is provided by the City. Residential areas (private property) must also be maintained in a manner that prevents the discharge of sediment, trash, green waste, automotive fluids, or other storm water pollutants from leaving the property.</p>	<p>Many commercial businesses have the potential to discharge storm water pollutants through normal business activities and therefore have the obligation to implement BMPs to prevent storm water pollution. Businesses need maintain good housekeeping practices to prevent the release of any material through wind or rain. Any materials discarded by customers or illegally dumped on the commercial property is the responsibility of the business.</p>
<p><b>Pollutant Generating Activities in the Public Right-of-Way</b>                      Any pollutant generating activity in the right-of-way is prohibited without written storm water conditions from the City. IBCM 8.30.050.C</p>	<p>The stockpiling of materials, maintenance of vehicles, or any other pollutant generating activity from residential areas is prohibited unless written permission is provided through an Encroachment Permit.</p>	<p>Commercial business activities in the public right-of-way such as special events, mobile businesses, or any other pollutant generating activity must receive written storm water conditions through either a Conditional Use Permit, Special Event Permit, Encroachment Permit, or similar.</p>

**Table I.7.4  
 Minimum Storm Water BMPs for Residential Areas and Commercial Facilities (continued)**

<b>Storm Water BMP &amp; Description</b>	<b>Residential BMP Implementation</b>	<b>Commercial BMP Implementation</b>
<p><b>Vehicle and Equipment Washing</b>                      The discharge of vehicle, boat, or equipment wash water to the storm water conveyance system should be contained, captured, reused, or properly disposed.</p>	<p>Residential vehicle washing is conditionally allowed according to IBMC 8.30.060.E.2 if minimum BMPs are implemented, which include use of shutoff nozzle, directing wash water to permeable areas, and minimizing the use of cleaning agents.</p>	<p>Not permitted.</p>
<p><b>Fire Sprinkler Maintenance</b>                      Properly dispose of water from fire sprinkler maintenance activities.                      IBCM 8.30.060.E.4</p>	<p>Building fire suppression systems maintenance water shall be directed to the sanitary sewer where feasible or receive filtration before discharging to the storm water conveyance system.</p>	<p>Building fire suppression systems maintenance water shall be directed to the sanitary sewer where feasible or receive filtration before discharging to the storm water conveyance system.</p>
<p><b>Irrigation Runoff</b>                      Irrigation runoff is considered a non-storm water discharge and is prohibited. IBMC 8.30.050.A</p>	<p>Any irrigation runoff, regardless of cause, is prohibited. Residential areas must maintain sprinkler systems to prevent dry weather runoff.</p>	<p>Not permitted.</p>

**Table I.7.4  
 Minimum Storm Water BMPs for Residential Areas and Commercial Facilities (continued)**

<b>Storm Water BMP &amp; Description</b>	<b>Residential BMP Implementation</b>	<b>Commercial BMP Implementation</b>
<p><b>Swimming Pool Water</b>                      Properly dispose of swimming pool water. IBMC 8.30.060.E.3</p>	<p>Swimming pool water must be directed to the sanitary sewer where feasible. Discharging to the storm water conveyance system is permitted if residual chlorine, algaecide, filter backwash, or other pollutants are eliminated prior to discharge. Saline pool water may also be discharged via a pipe or concrete channel directly to a naturally saline waterbody.</p>	<p>Swimming pool water must be directed to the sanitary sewer where feasible. Discharging to the storm water conveyance system is permitted if residual chlorine, algaecide, filter backwash, or other pollutants are eliminated prior to discharge. Saline pool water may also be discharged via a pipe or concrete channel directly to a naturally saline waterbody.</p>
<p><b>Air Conditioning Condensation</b>                      Properly dispose of air conditioning condensation. IBMC 8.30.060.E.1</p>	<p>Air conditioning condensation must be directed to landscaped areas, pervious surfaces, or the sanitary sewer. If the above BMPs are not feasible then the discharger must demonstrate that the discharge does not contain pollutants exceeding the California Toxics Rule through monitoring.</p>	<p>Air conditioning condensation must be directed to landscaped areas, pervious surfaces, or the sanitary sewer. If the above BMPs are not feasible then the discharger must demonstrate that the discharge does not contain pollutants exceeding the California Toxics Rule through monitoring.</p>
<p><b>Floor Mat Cleaning</b>                      Must be cleaned in a manner that prevents the discharge to the storm water conveyance system. IBMC 8.30.050.A</p>	<p>The discharge of any wash water into the storm water conveyance system is not permitted.</p>	<p>Kitchen floor mats or door mats must be washed in designated cleaning areas such as mop sinks or above indoor floor drains. If no acceptable indoor wash area exists then washing should occur over landscaped or pervious areas.</p>

**Table I.7.4  
 Minimum Storm Water BMPs for Residential Areas and Commercial Facilities (continued)**

<b>Storm Water BMP &amp; Description</b>	<b>Residential BMP Implementation</b>	<b>Commercial BMP Implementation</b>
<p><b>Fats, Oils, and Grease Management</b>                      Proper management of cooking oils helps prevent sanitary sewer overflows. IBCM 13.14</p>	<p>Residents shall not dispose waste cooking oil into the sanitary sewer and are encouraged to “dry wipe” cookware to remove grease before washing. Cooking oil may be collected in a container and disposed in the trash.</p>	<p>Food service establishments must implement BMPs to prevent the discharge of fats, oils, and grease into the sanitary sewer. Businesses with grease capture devices must provide regular maintenance and cleaning of such systems in accordance with IBCM 13.14.070. Outside grease storage containers must be covered and maintained free of spills or accumulation of grease on the outside of the container.</p>
<p><b>Storm Water BMP and LID Maintenance</b>                      BMPs installed, including low impact development (LID) and structural BMPs, must be inspected and maintained. IBCM 8.30.120</p>	<p>All installed storm water BMPs and LIDs must be inspected and cleaned at a minimum of once annually and maintained for proper function to serve the purpose for which it was intended.</p>	<p>All installed storm water BMPs and LIDs must be inspected and cleaned at a minimum of once annually and maintained for proper function to serve the purpose for which it was intended.</p>
<p><b>Erosion and Sediment Control</b>                      Vegetated soil, hill slopes, or any exposed dirt must be protected to prevent the illegal discharge of sediment. IBCM 8.30.070.A</p>	<p>Erosion and sediment control BMPs must be provided for residential areas that have exposed soils. The tracking or wind dispersion of sediment into the public right-of-way must also be controlled through implementation of BMPs.</p>	<p>Erosion and sediment control BMPs must be provided for commercial areas that have exposed soils. The tracking or wind dispersion of sediment into the public right-of-way must also be controlled through implementation of BMPs.</p>

**Table I.7.4**  
**Minimum Storm Water BMPs for Residential Areas and Commercial Facilities (continued)**

<b>Storm Water BMP &amp; Description</b>	<b>Residential BMP Implementation</b>	<b>Commercial BMP Implementation</b>
<p><b>Parking Area Maintenance</b>                      Regular cleaning of parking areas is required to prevent the discharge of metals, sediment, and auto fluids. IBMC 8.30.070.A</p>	<p>Parking lots, street curbs, private roads, and driveways in residential areas must receive regular cleaning by sweeping equipment or by other dry methods to prevent the illegal discharge of pollutants from the property. Cleaning using wet methods such as power washing must fully capture and properly dispose of wash water.</p>	<p>Parking lots, street curbs, and driveways adjacent to commercial businesses must receive regular cleaning by sweeping equipment or by other dry methods to prevent the illegal discharge of pollutants from the property. Cleaning using wet methods such as power washing must fully capture and properly dispose of wash water.</p>
<p><b>Landscape Maintenance</b>                      Landscape areas and maintenance activities must prevent the discharge of materials into the storm drain conveyance system. IBMC 8.30.070.A</p>	<p>Green waste from maintenance activities or vegetation debris must be prevented from entering the street or storm drain conveyance system. Good housekeeping BMPs for residential areas shall be implemented to prevent the discharge of organic material and fertilizers.</p>	<p>Green waste from maintenance activities or vegetation debris must be prevented from entering the street or storm drain conveyance system. Good housekeeping BMPs for commercial areas shall be implemented to prevent the discharge of organic material and fertilizers.</p>
<p><b>Drainage System Maintenance</b>                      Keep drain inlets, under drains, and curb gutter free of debris to help prevent storm water pollution and flooding. IBMC 8.30.070.A</p>	<p>Accumulation of materials in drainage systems on private property must be cleaned and maintained using dry methods of sweeping or vacuum. The street gutter shall also be cleaned by the property owner in addition to the regular street sweeping provided by the City.</p>	<p>Accumulation of materials in drainage systems on private property must be cleaned and maintained using dry methods of sweeping or vacuum. The street gutter shall also be cleaned by the property owner in addition to the regular street sweeping provided by the City.</p>

**Table I.7.4**  
**Minimum Storm Water BMPs for Residential Areas and Commercial Facilities (continued)**

<b>Storm Water BMP &amp; Description</b>	<b>Residential BMP Implementation</b>	<b>Commercial BMP Implementation</b>
<p><b>Good Housekeeping</b>                      Implementation of storm water BMPs through regular maintenance activities.                      8.30.070.A</p>	<p>Good housekeeping is the simplest and least costly BMP that includes regular maintenance practices of residential areas that result in the proper handling, storage, and disposal of materials to prevent the unintended release of pollutants. It is considered an effective source control measure.</p>	<p>Good housekeeping is the simplest and least costly BMP that includes regular maintenance practices of commercial facilities that result in the proper handling, storage, and disposal of materials to prevent the unintended release of pollutants. It is considered an effective source control measure.</p>
<p><b>Waste Handling and Disposal</b>                      The implementation of proper waste handling and disposal helps prevent the release of pollutants.                      8.30.070.A</p>	<p>Proper waste handling includes the storage, use and ultimate disposal of the various materials around residential areas. These include waste fluids, hazardous materials, trash and other items that require special consideration in order to prevent storm water pollution.</p>	<p>Commercial facilities often have specific waste handling needs depending on the type of business. Proper waste handling, use, and disposal is important to prevent the unintended release of storm water pollutants.</p>
<p><b>Hazardous Material Storage and Disposal</b>                      Hazardous materials require proper labeling, storage, use, and disposal to prevent storm water pollution and in accordance with applicable regulations. 8.30.070.A</p>	<p>Hazardous materials must be elevated and stored under covered areas. The City provides convenient options for residential household hazardous waste disposal which is managed by the Environmental Division at 619-424-4095.</p>	<p>Commercial facilities that generate hazardous materials are regulated locally by the County of San Diego Department of Environmental Health. Hazardous materials shall be labeled and disposed of properly.</p>

**Table I.7.4**  
**Minimum Storm Water BMPs for Residential Areas and Commercial Facilities (continued)**

<b>Storm Water BMP &amp; Description</b>	<b>Residential BMP Implementation</b>	<b>Commercial BMP Implementation</b>
<p><b>Trash Storage Area</b>                      Trash storage areas need to be properly sized, designed, and maintained to prevent storm water pollution. 8.30.070.A</p>	<p>Residents are required to maintain trash and recycling containers in a designated area and ensure that container lids are closed, free of crack or holes that allow liquid or solid waste to spill out, and the area is free of loose trash, litter, debris, liquids, or other pollutants that may get mobilized from wind or storm events.</p>	<p>Commercial facilities must maintain trash storage and recycling areas and ensure that container lids are closed, free of crack or holes that allow liquid or solid waste to spill out, and the area is free of loose trash, litter, debris, liquids, or other pollutants that may get mobilized from wind or storm events.</p>
<p><b>Outdoor Equipment, Liquid, and Material Storage Areas</b>                      The storage of any material outside needs to be protected to prevent the unintended release of pollutants. 8.30.070.A</p>	<p>Outdoor storage areas must be elevated, covered, or otherwise fully protected with the appropriate level of BMPs to prevent the unintended release of pollutants. Prevent or capture leaks from vehicles or other equipment.</p>	<p>Commercial facilities must have properly designed outdoor storage areas to prevent the unintended release of pollutants. Covering, containing, and elevating materials off the ground prevents pollutants from contaminating storm water by preventing run-on from directly contacting materials, and by preventing materials from being transported by water or wind.</p>
<p><b>Outdoor Work Areas</b>                      Outdoor work areas and activities may generate pollutants and must be protected under covered areas or protected by BMPs that prevents the unintended release of pollutants. 8.30.070.A</p>	<p>Outdoor work areas and activities such as loading/unloading areas, waste disposal, construction, and O&amp;M often generate debris or waste liquids that increase the risk of outdoor spills. Storm water BMPs must be implemented to protect the area of work and protect from the unintended release of pollutants.</p>	<p>Storm water BMPs apply to all commercial areas that perform work outside and may generate pollutants. Commercial facilities must implement source control BMPs to contain the potential release of any pollutants including trash, oil and grease, liquids, and construction debris. Structural treatment devices may be necessary to remove pollutants if source controls BMPs are not effective.</p>

**Table I.7.4**  
**Minimum Storm Water BMPs for Residential Areas and Commercial Facilities (continued)**

<b>Storm Water BMP &amp; Description</b>	<b>Residential BMP Implementation</b>	<b>Commercial BMP Implementation</b>
<p><b>Pesticide and Fertilizer Management</b>                      The use of pesticide and fertilizers must be applied in strict accordance with the manufacture’s label. The City encourages the practice of integrated pest management principles (IPM). 8.30.070.A</p>	<p>Residents are encouraged to minimize the use of chemical applications use through the implementation of integrated pest management principles (www.ipm.ucdavis.edu). The storage, use, and disposal of fertilizers or pesticides must follow in strict accordance with the manufacture’s label. Carefully use only the needed amount and clean up afterwards to prevent runoff and over irrigation from carrying chemicals to storm drains.</p>	<p>Businesses are encouraged to minimize the use of chemical applications use through the implementation of integrated pest management principles (www.ipm.ucdavis.edu). The storage, use, and disposal of fertilizers or pesticides must follow in strict accordance with the manufacture’s label. Carefully use only the needed amount and clean up afterwards to prevent runoff and over irrigation from carrying chemicals to storm drains.</p>
<p><b>Spill Response Plan</b>                      A site specific plan that provides clear instructions on how to prevent and respond to the release from pollutants that may impact the storm water system. 8.30.070.A</p>	<p>Residents performing any activity with the potential to generate storm water pollution must be able to prevent and/or respond to the unintentional release of pollutants into the storm water conveyance system through the use of BMPs.</p>	<p>Commercial facilities are required to have a written plan that identifies the BMPs that will be implemented to prevent storm water pollution from leaving their property. Commercial facilities with Hazardous materials may also need a Spill Prevention, Control, and Countermeasures (SPCC) Plan or Hazardous Materials Business Plan per County, State, and Federal regulations. Facilities must maintain materials on site to respond and clean up spills.</p>

**Table I.7.4**  
**Minimum Storm Water BMPs for Residential Areas and Commercial Facilities (continued)**

<b>Storm Water BMP &amp; Description</b>	<b>Residential BMP Implementation</b>	<b>Commercial BMP Implementation</b>
<p><b>Training</b>                      Training is important to ensure that any person undertaking any activity or use of a premise is fully aware of how to prevent storm water pollution.                      8.30.070.A</p>	<p>The City responds to reports of illegal discharges and provides education and outreach to residents to prevent storm water pollution. The Storm Water hotline is available to provide information or training at 619-424-4095.</p>	<p>Commercial facilities must include storm water pollution prevention measures in routine employee training programs. Training programs should also review the facility’s spill response plan and minimum storm water BMPs. The Storm Water hotline is available to provide information or training at 619-424-4095.</p>
<p><b>Animal Waste Management</b>                      Animals and animal waste must be managed and stored in a manner that prevents any material or wash water from reaching the storm drain. 8.30.070.A</p>	<p>Residents must clean up pet waste because it is a source of bacteria, viruses, and other pollutants. Any water used to clean animals or animal housing must be disposed in the sanitary sewer or allowed to infiltrate into landscaped areas.</p>	<p>Commercial businesses that allow animals or provide animal services must provide proper disposal for animal waste and wash water. Outdoor storage areas must be fully covered and protected to prevent the release of storm water pollutants.</p>
<p><b>Temporary Storm Drain Protection</b>                      The use of temporary storm drain protection such as drain covers and check dams may be required when performing pollutant generating activities.                      8.30.070.A</p>	<p>The use of storm drain filter covers or check dams along the curb gutters should be utilized when performing pollutant generating activities from residential areas such as construction activity, vehicle washing, or any other activity that presents a reasonable potential to release pollutants.</p>	<p>The use of storm drain filter covers or check dams along the curb gutters should be utilized when performing pollutant generating activities from commercial areas such as construction activity, special events, or any other activity that presents a reasonable potential to release pollutants.</p>

**Table I.7.4**  
**Minimum Storm Water BMPs for Residential Areas and Commercial Facilities (continued)**

<b>Storm Water BMP &amp; Description</b>	<b>Residential BMP Implementation</b>	<b>Commercial BMP Implementation</b>
<p><b>Mobile Cleaning Services</b>                      The discharge of any wash water to the street or storm drain conveyance system is prohibited.</p>	<p>Cleaning services such as carpet cleaning, vehicle washing, and power washing must fully capture and properly dispose all wash water in the sanitary sewer or recycle and reuse the water.</p>	<p>Cleaning services such as carpet cleaning, vehicle washing, and power washing must fully capture and properly dispose all wash water in the sanitary sewer or recycle and reuse the water.</p>

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## ***Construction BMP Categories***

The City is required to ensure the implementation of construction BMPs that cover the following categories: project planning, good site management (housekeeping), non-storm water management, erosion control, sediment control, run-on and runoff control, and active or passive treatment systems (when applicable).

### **Project Planning BMPs**

Construction projects are required to implement appropriate type and phasing of BMPs given specific site conditions, seasons, likelihood of forecast rain events, and based on construction phase. Minimum project planning BMPs may include but not limited to the following:

- Rain event plans
- Implementation of phased BMPs based on type of construction activity
- Minimize cleared areas to only the portion of the site that is necessary for construction
- Minimize grading during the wet season
- Preserve natural areas and buffers
- Employee training
- Require a Storm Water Management Plan that identifies BMPs for each site

### **Housekeeping BMPs**

Construction projects are required to implement good site management (housekeeping) BMPs to prevent the generation of storm water pollution by implementing proper waste management practices and pollution prevention methods. Minimum housekeeping BMPs may include but not limited to the following:

- Designate area for vehicle or equipment storage and maintenance
- Implement proper waste management and disposal
- Maintain a clean and well managed site
- Replace damaged BMPs

### **Non-Storm Water Management BMPs**

Construction projects are required to implement non-storm water management BMPs that prevent the discharge of pollutants off the site. Minimum non-storm water management BMPs may include but not limited to the following:

- Contain and properly dispose of wash water
- Designate a concrete washout area
- Prohibit the discharge of non-storm water
- Manage airborne dust

### **Erosion Control BMPs**

Construction projects are required to implement erosion control BMPs to prevent the erosion of sediment from the site. Minimum erosion control BMPs may include but not limited to the following:

- Minimize the exposure time of disturbed soils
- Provide erosion control BMPs such as straw wattles and check dams to slow the velocity of storm water on the site
- Protect sediment stockpiles
- Provide slope stabilization
- Require the stabilization or reseeding of disturbed soil areas as rapidly as possible
- Maintain erosion control BMPs until the site is stabilized

### **Sediment Control BMPs**

Construction projects are required to implement sediment control BMPs as a supplement to erosion control and never as the single or primary method for controlling storm water pollutants. Minimum sediment control BMPs may include but not limited to the following:

- Prevent vehicle tracking of sediment
- Require street sweeping
- Provide detention areas for storm water
- Reinforce downstream BMPs

### **Run-on and Runoff Control BMPs**

Construction projects are required to implement run-on and runoff control BMPs to prevent the discharge of pollutants. The site also needs protection from unintended upstream flows that may impact construction activities. Minimum run-on and runoff control BMPs may include but not limited to the following:

- Maintain perimeter protection with silt fence

- Provide inlet protection

### **Active or Passive Sediment Treatment Systems**

Construction projects that are determined by the City to be an exceptional threat to water quality are required to implement advanced treatment for sediment through the use of engineered active or passive sediment treatment systems. Active or passive sediment treatment systems are not common for the typical construction activity in the City.

### ***Construction Site Inspections***

The City is required to confirm compliance of prescribed construction storm water BMP conditions and local ordinance through construction site inspections. Every construction project in the City is considered a potential high threat to water quality because the City only discharges to environmentally sensitive areas. Inspection frequency and oversight is therefore maximized in order to protect water quality. Setting the same standard of compliance for all construction activity also eliminates any confusion by contractors or City staff on implementing BMPs and performing inspections for compliance.

### **Inspection Frequency**

#### **Private Construction Projects:**

The City considers all construction activity a potential high threat to water quality and requires the verification of storm water BMPs anytime an inspection is made on the site. For private development projects, construction BMP inspections are performed by the City's Building Inspector and overseen by the Building Official. The inspection frequency for private development projects requires the verification of storm water BMPs anytime the Building Inspector makes a visit to the site, which includes an initial project inspection, final project inspection, and any subsequent building permit inspection in between. Projects that create a larger construction footprint naturally require a greater number of inspections from the Building Inspector and therefore receive a higher number of storm water inspections. The City's Environmental Division also provides an additional layer of oversight of private construction activity through the neighborhood inspection of existing development where a full time Environmental Specialist and the City's highly trained Public Works field crew are able to provide visual observations of any pollutant generating activity within the 2.1 square miles of the City's urban area.

#### **Public Construction Projects:**

The City's Public Works Inspector performs construction storm water BMP inspections for capital projects and requires daily inspections when the contractor is on site. The Public Works Inspector tracks the progress of each construction project through Daily Inspection Reports, which include implementation of storm water BMPs as a key component. Capital projects that require a Construction General Permit also receive additional storm water inspections from a Qualified SWPPP Practitioner (QSP) provided by the contractor who then coordinates inspection results with the City Engineer as the designated QSD.

## **Inspection Content**

Storm water construction inspections include at the minimum the following components as required by the Storm Water Permit:

- Verification of coverage under the Construction General Permit if applicable (WDID Number)
- Assessment of compliance with existing Storm Water Management Plan, permits, IBMC 8.30, and implementation and maintenance of applicable BMPs
- Assessment of BMP adequacy and effectiveness
- Visual observations of actual non-storm water discharges
- Visual observations of actual or potential discharges of sediment and/or construction related materials from the site
- Visual observations of actual or potential illicit connections
- Verify the correction of BMP violations and document appropriate actions taken

## **Inspection Tracking and Records**

The City is required to track all storm water construction inspections and re-inspections in a database that is to be made available to the RWQCB upon request and used for annual reporting for each WQIP. The City's Environmental Division will tabulate the storm water construction inspection records from the Building Official and Public Works Inspector in a database that includes at the minimum the following categories:

- Site name, address, hydraulic subarea location, and WDID number (if applicable)
- Inspection dates
- Rain event dates and rainfall storm totals
- Description of problems observed with BMPs and indication of need for BMP addition, BMP repair, or BMP replacement
- Verification that BMP deficiencies were resolved within 24 hours or rational for longer compliance time
- Description of enforcement actions

## **I.8 CITY OF LA MESA STRATEGIES**

The City of La Mesa (La Mesa) is located in the hills of San Diego County with walkable, tree-lined neighborhoods and retail and commercial areas. La Mesa has received funding to implement green infrastructure along a busy corridor of University Avenue. Other strategies to improve water quality include enhancing MS4 infrastructure maintenance and promoting water efficient landscape BMPs. Strategies and implementation schedules, presented in Table I.8.1, were identified using best information available on efficiency, effectiveness, and level of effort estimated to achieve compliance with numeric goals. In Chollas Creek, a compliance analysis using a watershed model was conducted to identify the strategies required to be implemented to meet final goals. The strategies and implementation schedules identified demonstrate that numeric goals are met. The adaptive management process provides the framework to evaluate progress toward meeting the goals and allows for modification of strategies. As strategies are modified, the compliance analysis is updated as needed to provide assurance that numeric goals are met.

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**Table I.8.1 City of La Mesa  
 Jurisdictional Strategies**

SDB ID	Strategy	Implementation Approach  (Frequency of Inspections, Resources, Triggers, Inventory BMPs)	Sources	Pollutant Addressed							Jurisdictional or Optional	Implementation Year (or Trigger if Optional)	Implementation Schedule	Responsible City Department and Other Collaborating Departments or Agencies
				Bacteria	Nutrients	Metals	Trash	Sediments	Flow	Habitat				
<b>Jurisdictional Strategies</b>														
<b>Development Planning</b>														
<b>All Development Projects</b>														
LM-1	For all development projects, administer a program to ensure implementation of source control BMPs to minimize pollutant generation at each project and implement LID BMPs to maintain or restore hydrology of the area, where applicable and feasible.	Triggered upon pulling of building permit.	Land Development	X	X	X	X	X	X	X	Jurisdictional	Prior to FY16	Ongoing	Public Works Department, Engineering Department
LM-2	Amend municipal code and ordinances to require LID implementation.	La Mesa has amended ordinances for dry weather component and per new BMP Manual.	Land Development	X	X	X	X	X	X		Jurisdictional	FY15	As needed	Public Works Department, Engineering Department
LM-3	Train staff on LID regulatory changes and LID Design Manual.	The City shall perform training related to water quality design for CIPs in Q4 2015.	Land Development								Jurisdictional	FY15	Annually	Public Works Department, Engineering Department
<b>Priority Development Projects (PDPs)</b>														
LM-4	For PDPs, administer a program requiring implementation of structural BMPs to control pollutants and manage hydromodification. Includes confirmation of design, construction, and maintenance of PDP structural BMPs.	Trigger is private project application and PDP status.	Land Development	X	X	X	X	X	X		Jurisdictional	Prior to FY16	Ongoing	Public Works Department, Engineering Department
	1. Administer self-certification program for treatment control BMP compliance.	La Mesa has a program in place. Continue to add projects as they are constructed.	Land Development	X	X	X	X	X	X		Jurisdictional	Prior to FY16	Annually	Public Works Department, Engineering Department

**Table I.8.1 City of La Mesa  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, Resources, Triggers, Inventory BMPs)	Sources	Pollutant Addressed							Jurisdictional or Optional	Implementation Year (or Trigger if Optional)	Implementation Schedule	Responsible City Department and Other Collaborating Departments or Agencies
				Bacteria	Nutrients	Metals	Trash	Sediments	Flow	Habitat				
LM-5	Update BMP Design Manual procedures to determine nature and extent of storm water requirements applicable to development projects and to identify conditions of concern for selecting, designing, and maintaining appropriate structural BMPs.	The City will update its BMP Design Manual to comply with approved Regional Manual, and MS4 Permit.	Land Development	X	X	X	X	X	X	X	Jurisdictional	Prior to FY16	As needed	Public Works Department, Engineering Department
	1. Amend BMP Design Manual for trash areas. Require full four-sided enclosure, siting away from storm drains and cover. Consider the retrofit requirement.	La Mesa will amend the BMP Design Manual for trash areas, and implement where feasible.	Land Development, Commercial	X			X				Jurisdictional	FY16	As needed	Public Works Department, Engineering Department
	2. Amend BMP Design Manual for mobile businesses.	Businesses are required to read and sign a storm water affidavit and comply with rules in order to receive a permit.	Commercial Business	X			X		X		Jurisdictional	Prior to FY16	As needed	Public Works Department, Engineering Department
LM-6	Administer an alternative compliance program to on-site structural BMP implementation (includes identifying Watershed Management Area Analysis [WMAA] candidate projects).	The City will implement an alternative compliance program to meet City and Developer needs and to fund city CIP restoration style/LID projects.	Land Development	X	X	X	X	X	X	X	Jurisdictional	FY18	Ongoing	Public Works Department, Engineering Department
<b>Construction Management</b>														
LM-7	Administer a program to oversee implementation of BMPs during the construction phase of land development. Includes inspections at an appropriate frequency and enforcement of requirements.	The City currently implements this program. During wet season, high priority areas are inspected every two weeks, medium areas are inspected monthly, and low priority areas are inspected once per rainy season.	Construction				X	X			Jurisdictional	Prior to FY16	Ongoing	Public Works Department, Engineering Department

**Table I.8.1 City of La Mesa  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, Resources, Triggers, Inventory BMPs)	Sources	Pollutant Addressed							Jurisdictional or Optional	Implementation Year (or Trigger if Optional)	Implementation Schedule	Responsible City Department and Other Collaborating Departments or Agencies
				Bacteria	Nutrients	Metals	Trash	Sediments	Flow	Habitat				
<b>Existing Development</b>														
<b>Commercial, Industrial, Municipal, and Residential Facilities and Areas</b>														
LM-8	Administer a program to require implementation of minimum BMPs for existing development (commercial, industrial, municipal, and residential) that are specific to the facility, area types, and PGAs, as appropriate. Includes inspection of existing development at appropriate frequencies and using appropriate methods.	All facilities are inspected at least annually. Many areas are inspected several times per year.	Commercial, Municipal, Residential	X	X	X	X	X	X		Jurisdictional	Prior to FY16	Ongoing	Public Works Department, Engineering Department
	1. Update minimum BMPs for existing residential, commercial, and industrial development.	The City will update minimum BMPs during JRMP update to include a new residential program. In addition, outdoor exposure will trigger action for BMPs.	Commercial, Municipal, Residential	X	X	X	X	X	X		Jurisdictional	Prior to FY16	Ongoing	Public Works Department, Engineering Department
	2. Design, implement, and enforce property based inspections.	La Mesa has implemented property based inspections. Each business will be inspected at least once a year, and high priority areas will be inspected more than once.	Commercial	X	X	X	X	X	X		Jurisdictional	FY15	Annually	Public Works Department, Engineering Department
	3. Increase inspection for highest pollutant potential businesses.	The City will increase inspections based on effectiveness of new program. It currently has FOG inspections for restaurants and will prioritize auto-related facilities within Chollas. Every business is inspected every year.	Commercial	X		X					Jurisdictional	FY15	Ongoing	Public Works Department, Engineering Department
	4. Provide BMP factsheet to water-using mobile businesses when business license is granted, and require minimum BMPs for mobile businesses.	Trigger is the application for a business license.	Commercial	X			X		X		Jurisdictional	Prior to FY16	As needed	Public Works Department, Engineering Department

**Table I.8.1 City of La Mesa  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, Resources, Triggers, Inventory BMPs)	Sources	Pollutant Addressed							Jurisdictional or Optional	Implementation Year (or Trigger if Optional)	Implementation Schedule	Responsible City Department and Other Collaborating Departments or Agencies	
				Bacteria	Nutrients	Metals	Trash	Sediments	Flow	Habitat					
LM-8	5. Review policies and procedures to ensure discharges from swimming pools meet permit requirements.	La Mesa will update swimming pool items per changes in code.	Residential							X		Jurisdictional	FY15	As needed	Public Works Department, Engineering Department
	6. Require sweeping and maintenance of private roads and parking lots in targeted areas.	Optional.	Commercial	X		X	X	X				Optional	Trigger (upon need)		Public Works Department, Engineering Department
	7. Implement Water Efficient Landscape Ordinance.	The City already has a State mandated landscape ordinance.	Commercial, Residential							X		Jurisdictional	Prior to FY16	Ongoing	Public Works Department, Engineering Department
LM-9	Implement pet waste program. May include installation and maintenance of pet waste bag dispensers and trash bins, signage and education, and physical removal of pet waste.	La Mesa has a preexisting pet waste program.	Municipal	X								Jurisdictional	Prior to FY16	Ongoing	Public Works, Parks
LM-10	Promote and encourage implementation of designated BMPs at residential areas.		Residential	X	X	X	X	X	X			Jurisdictional	Prior to FY16	Ongoing	Public Works
	1. Expand residential BMP (irrigation, rainwater harvesting, and turf conversion) rebate programs to multi-family housing in target areas.	La Mesa will potentially collaborate with HOAs for rebates, inspection reduction programs, and more.	Residential							X		Jurisdictional	Prior to FY16	Ongoing	Public Works, HOAs
	2. Promote and collaborate with water agencies and other groups to encourage implementation of water conservation programs that improve water quality by reducing over-irrigation with smart products or turf replacement and capturing rain water in residential areas.	La Mesa will collaborate with Helix Water District on rebate programs, via promotion on website.	Commercial, Residential							X		Jurisdictional	Prior to FY16	Ongoing	Public Works, Helix Water District
	3. Implement Residential BMP: Rain Barrel	The City already has been implementing rain barrels via Helix Water.	Residential							X		Jurisdictional	Prior to FY16	Ongoing	Public Works, Helix Water District
LM-11	Promote and encourage implementation of designated BMPs in non-residential areas.	La Mesa will work with Helix Water District. There will be dry weather benefits.	Commercial	X	X	X	X	X	X			Jurisdictional	Prior to FY16	Ongoing	Public Works Department, Engineering Department

**Table I.8.1 City of La Mesa  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, Resources, Triggers, Inventory BMPs)	Sources	Pollutant Addressed							Jurisdictional or Optional	Implementation Year (or Trigger if Optional)	Implementation Schedule	Responsible City Department and Other Collaborating Departments or Agencies
				Bacteria	Nutrients	Metals	Trash	Sediments	Flow	Habitat				
LM-12	Implement program to investigate illegal grading on private property.	The City investigates illegal grading based on reports to code compliance and Public Works.	Commercial, Residential					X			Jurisdictional	Prior to FY16	Weekly	Public Works Department, Engineering Department
<b>MS4 Infrastructure</b>														
LM-13	Implement operation and maintenance activities (inspection and cleaning) for MS4 and related structures (catch basins, storm drain inlets, detention basins, etc.) for water quality improvement and flood control.	At least once annually, and high priority areas with added frequency.	Municipal	X	X	X	X	X			Jurisdictional	Prior to FY16	Ongoing	Public Works Department, Engineering Department
	1. Optimize catch basin cleaning to maximize pollutant removal.	La Mesa has 455 catch basins in the Chollas Creek watershed. Current frequency is at least once per year per year. Added frequency in Chollas will be completed if staff is available.	Municipal	X	X	X	X	X			Jurisdictional	FY18	Ongoing	Public Works Department, Engineering Department
	2. Repair MS4 components to provide source control from MS4 infrastructure.	The City repairs MS4 components as needed based on condition assessment and prioritization process.	Municipal	X	X	x	X	X			Jurisdictional	Prior to FY16	As needed	Public Works Department, Engineering Department
LM-14	Identify sewer leaks and areas for sewer pipe replacement prioritization.	La Mesa replaces as needed based on sewer condition assessment and long-term prioritization.	Municipal	X	X						Jurisdictional	Prior to FY16	Ongoing	Public Works Department, Engineering Department
	1. Replace pipes as needed in Chollas watershed.	La Mesa currently is performing trunk main pipe replacements. One project is occurring at University and Massachusetts Avenues.	Municipal	X	X						Jurisdictional	FY17	As needed	Public Works Department, Engineering Department

**Table I.8.1 City of La Mesa  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, Resources, Triggers, Inventory BMPs)	Sources	Pollutant Addressed							Jurisdictional or Optional	Implementation Year (or Trigger if Optional)	Implementation Schedule	Responsible City Department and Other Collaborating Departments or Agencies
				Bacteria	Nutrients	Metals	Trash	Sediments	Flow	Habitat				
<b>Roads, Street, and Parking Lots</b>														
LM-15	Implement operation and maintenance activities for public streets, unpaved roads, paved roads, and paved highways	The City has a preexisting street sweeping schedule that is prioritized by area.	Municipal			X	X	X			Jurisdictional	Prior to FY16	Ongoing	Public Works
	1. Perform street sweeping in roads, parking lots, and medians on high-volume arterial roadways.	High traffic and arterial areas are swept once a week, other arterial areas are swept every other week, and residential areas are swept once a month. Parking lots and medians are included in street sweeping program.	Municipal	X	X	X	X	X			Jurisdictional	Prior to FY16	Ongoing	Public Works
	2. Enhance street sweeping through equipment replacement (replace every 4 years) and route optimization (sweep commercial routes bi-weekly and residential every other month)	Street sweeping is contracted out, and the contractor uses Regen Air sweepers. The City plans to increase frequency in high traffic areas in Chollas to two times a week.	Municipal	X	X	X	X	X			Jurisdictional	FY18	Ongoing	Public Works
<b>Pesticide, Herbicides, and Fertilizer BMP Program</b>														
LM-16	Require implementation of BMPs to address application, storage, and disposal of pesticides, herbicides, and fertilizers on commercial, and municipal properties. Includes education, permits, and certifications.	The City does not have authority over application of pesticides but will implement BMPs. Industrial and commercial inspections cover requirement, and Parks and Rec implement municipal program.	Commercial, Municipal								Jurisdictional	Prior to FY16	Ongoing	Public Works, Parks and Rec

**Table I.8.1 City of La Mesa  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, Resources, Triggers, Inventory BMPs)	Sources	Pollutant Addressed							Jurisdictional or Optional	Implementation Year (or Trigger if Optional)	Implementation Schedule	Responsible City Department and Other Collaborating Departments or Agencies
				Bacteria	Nutrients	Metals	Trash	Sediments	Flow	Habitat				
<b>Retrofit and Rehabilitation in Areas of Existing Development</b>														
LM-17	Develop and implement a strategy to identify candidate areas of existing development appropriate for retrofitting projects and facilitate the implementation of such projects.	La Mesa will target municipal areas.	Municipal	X	X	X	X	X	X	X	Jurisdictional	FY16	Ongoing	Public Works Department, Engineering Department
LM-18	Develop and implement a strategy to identify candidate areas of existing development for stream, channel, or habitat rehabilitation projects and facilitate implementation of such projects.	Potential stream, channel, or habitat rehabilitation projects will be selected based upon a variety of factors including the reasonable access of a project (right of way, hydrologic factors), areas existing stream or habitat degradation, multiple benefits of the project, and feasibility of implementation. Projects can arise as part of the Offsite Alternative Compliance Program. The program will include protocols related to funding mechanisms for project construction and long-term maintenance, payment and credit structures, and water quality equivalency standards. Grant funding can be utilized as available.	FY17	Continuous – Ongoing	X	X	X	X	X	X	X	Various	Public Works	LM-18
<b>Illicit Discharge, Detection, and Elimination (IDDE) Program</b>														
LM-19	Implement Illicit Discharge, Detection, and Elimination (IDDE) Program per the JRMP. Requirements include: maintaining an MS4 map, using municipal personnel and contractors to identify and report illicit discharges, maintaining a hotline for public reporting of illicit discharges, monitoring MS4 outfalls, and investigating and addressing any illicit discharges.		Commercial, Municipal, Residential	X	X	X	X	X	X	X	Jurisdictional	Prior to FY16	Ongoing	Public Works
	1. Develop and implement approaches to address the impacts of septic systems within the watershed	Addresses Bacteria caused by Septic.	Residential	X							Jurisdictional	FY 16	Ongoing	Public Works/County of San Diego

**Table I.8.1 City of La Mesa  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, Resources, Triggers, Inventory BMPs)	Sources	Pollutant Addressed							Jurisdictional or Optional	Implementation Year (or Trigger if Optional)	Implementation Schedule	Responsible City Department and Other Collaborating Departments or Agencies
				Bacteria	Nutrients	Metals	Trash	Sediments	Flow	Habitat				
	2. Develop and implement approaches to address the impacts of homeless activities within the watershed.	Addresses Bacteria caused by homeless.	Commercial, Municipal	X			X				Jurisdictional	FY 17	Ongoing	Public Works/LMPD
<b>Public Education and Participation</b>														
LM-20	Implement a public education and participation program to promote and encourage development of programs, management practices, and behaviors that reduce the discharge of pollutants in storm water prioritized by high-risk behaviors, pollutants of concern, and target audiences.		Residential	X	X	X	X	X			Jurisdictional	Prior to FY16	Ongoing	Public Works
	1. Conduct trash cleanups through community-based organizations involving target audiences.	La Mesa works with "I Love a Clean San Diego" and holds two major cleanups in each watershed per year. The City will possibly work with Groundworks Chollas or other NGOs. Private cleanups are conducted through code enforcement.	Commercial, Municipal, Residential				X				Jurisdictional	Prior to FY16	Ongoing	Public Works, ILACSD, Community Development/Code Enforcement
	2. Review City storm water website and identify and implement required updates to reflect WQIP and JRMP revisions.	The City will update the website to include new permit information, such as for irrigation.	Land Development, Commercial, Residential								Jurisdictional	FY15	As needed	Public Works
	3. Target human behavior in parks and other public areas including trash reduction or other high impact behavior to habitat, wildlife, and water quality.	Six kiosks have been built in parks in collaboration with Eagle Scouts and other community groups. Information on trash and other public issues can be included in these kiosks. La Mesa plans to build more storm water kiosks as partners are available.	Municipal	X	X	X	X			X	Jurisdictional	Prior to FY16	Ongoing	Public Works, Eagle Scouts, community groups
	4. Enhance school and recreation-based education and outreach.	"I Love a Clean San Diego" presents in schools.	Residential								Jurisdictional	Prior to FY16	Ongoing	Public Works, ILACSD

**Table I.8.1 City of La Mesa  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, Resources, Triggers, Inventory BMPs)	Sources	Pollutant Addressed							Jurisdictional or Optional	Implementation Year (or Trigger if Optional)	Implementation Schedule	Responsible City Department and Other Collaborating Departments or Agencies
				Bacteria	Nutrients	Metals	Trash	Sediments	Flow	Habitat				
LM-20	5. Continue to support the Environmental Sustainability Commission (ESC), a committee of local residents and business owners working to preserve La Mesa's environment.	The ESC manages the Environmental Awareness Festival, serves as an advisory body to the City Council on how actions and policies of the City may preserve and enhance the quality of La Mesa's environment, and addresses the effects of climate change and assists in the identification of measures that will improve environmental sustainability in La Mesa and the region.	Municipal								Jurisdictional	Prior to FY16	Ongoing	ESC
	6. Collaborate with regional education and outreach efforts.	La Mesa collaborates on regional efforts conducted by the Education Workgroup.	Residential								Jurisdictional	Prior to FY16	Ongoing	Public Works
	7. Develop education and outreach to reduce over-irrigation.	If over irrigation is reported, contact is made via a compliance letter.	Residential						X		Jurisdictional	FY16	Ongoing	Public Works
LM-21	Provide technical education and outreach to the development community on the design and implementation requirements of the Municipal Permit and WQIP requirements.	This will be done regionally and as needed or requested within the City.	Land Development								Jurisdictional	FY14	As needed	Public Works, regional agencies/groups
<b>Enforcement Response Plan</b>														
LM-22	Implement escalating enforcement responses to compel compliance with statutes, ordinances, permits, contracts, orders, and other requirements for IDDE, development planning, construction management, and existing development in the Enforcement Response Plan.	Enforcement program consists of warning, NOV, and citation.	Commercial, Residential, Construction, Land Development	X	X	X	X	X	X		Jurisdictional	Prior to FY16	Ongoing	Public Works

**Table I.8.1 City of La Mesa  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, Resources, Triggers, Inventory BMPs)	Sources	Pollutant Addressed							Jurisdictional or Optional	Implementation Year (or Trigger if Optional)	Implementation Schedule	Responsible City Department and Other Collaborating Departments or Agencies
				Bacteria	Nutrients	Metals	Trash	Sediments	Flow	Habitat				
<b>Additional Nonstructural Strategies</b>														
LM-23	Continue participating in source reduction initiatives.	La Mesa will continue to participate in source reduction initiatives.	Municipal	X	X	X	X	X	X		Jurisdictional	Prior to FY16	Ongoing	Public Works
	1. Replace City-owned vehicle brake pads with copper-free brake pads as they become commercially available.	Optional. Upon availability.	Municipal			X					Optional	Trigger (upon availability of technology)		Public Works
	2. Continue implementation of cigarette ban in parks and commercial areas.	La Mesa will continue the cigarette ban and maintain existing cigarette ash cans.	Municipal				X				Jurisdictional	Prior to FY16	Ongoing	Public Works
	3. Enhance program to address and capture trash and debris.	The City will install additional capture/trash guards.	Municipal				X				Jurisdictional	FY18	Ongoing	Public Works
LM-24	Proactively monitor for erosion, and complete minor repair and slope stabilization on municipal property.	Upon report and funding allocation for the project.	Municipal					X			Jurisdictional	FY16	Ongoing	Public Works
LM-25	Conduct special studies.		All								Jurisdictional			Public Works
	1. Reference watershed study.	The City will continue to contribute to the study.	All								Jurisdictional	Prior to FY16	Ongoing	Public Works
LM-26	Proactively repair and replace corrugated metal pipe (CMP) MS4 components to provide source control from MS4 infrastructure.	La Mesa is trying to get rid of CMP as part of the prioritized replacement program.	Municipal					X			Jurisdictional	Prior to FY16	Ongoing	Public Works
LM-27	If a regional social services effort is established, support workgroup to provide sanitation and trash management for person experiencing homelessness and determine if the program is suitable and appropriate for jurisdictional needs to meet goals.	La Mesa does not have a homeless outreach team. Police and property owners enforce cleanups of encampments. If there is a regional effort, La Mesa will participate.	Municipal	X			X				Optional	Trigger (upon regional effort)		Public Works

**Table I.8.1 City of La Mesa  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, Resources, Triggers, Inventory BMPs)	Sources	Pollutant Addressed							Jurisdictional or Optional	Implementation Year (or Trigger if Optional)	Implementation Schedule	Responsible City Department and Other Collaborating Departments or Agencies
				Bacteria	Nutrients	Metals	Trash	Sediments	Flow	Habitat				
<b>Green Infrastructure</b>														
LM-28	Implement stream, channel, and habitat rehabilitation projects as needed.	This strategy may be triggered if 1) Interim goals are not met, 2) Stream or habitat rehabilitation is determined to be a more effective pathway, relative to additional structural or non-structural BMPs to meeting goals, 3) Funding and staffing has been secured, 4) Partners, MOUs, and permits required by regulatory agencies are secured, and 5) Recommendations from the community are identified and consensus and community support has been achieved. Will occur in areas identified during feasibility studies. The following resources, funds, and steps are needed to implement this strategy if the above triggers are met or at the City's discretion: 1) Identify project locations, 2) Secure funds in the form of general funds, bonds, or grants, 3) Obtain City Council approval of Capital Improvement Projects budget, 4) Initiate preliminary engineering to narrow project scope, 5) Hire design consultant to develop detailed construction plans and construction cost estimates, 6) Complete construction contractor bid and award process for construction phase, 7) Construct project, 8) Operation and maintenance into perpetuity.	Trigger	Continuous – Ongoing	X	X	X	X	X	X	X	Various	Public Works	LM-28

**Table I.8.1 City of La Mesa  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, Resources, Triggers, Inventory BMPs)	Sources	Pollutant Addressed							Jurisdictional or Optional	Implementation Year (or Trigger if Optional)	Implementation Schedule	Responsible City Department and Other Collaborating Departments or Agencies
				Bacteria	Nutrients	Metals	Trash	Sediments	Flow	Habitat				
LM-29	Identify any planned or potential green infrastructure projects to be constructed.	The City is still considering GI and multi-use project opportunities.	Municipal	X	X	X	X	X	X			FY25		Public Works
<b>Water Quality Improvement BMPs</b>														
<b>Proprietary BMPs</b>														
LM-30	Identify any planned or potential proprietary BMP projects to be constructed.		-								Jurisdictional	FY18-20	Ongoing	Planning/Engineering
	1. Planned- A city park is proposed to be built in a parcel of barren land along Waite Drive. This area can be included for long-term centralized planning.	City Council funding and final design for the project.	Municipal	X	X	X	X	X	X		Jurisdictional	FY 18-20	Ongoing	Planning/Engineering
	2. Planned- A BMP is proposed to be installed in the Future Rehabilitation Project of Vista La Mesa Park.	City Council funding and final design for the project.	Municipal	X	X	X	X	X	X		Jurisdictional	FY 18-20	Ongoing	Planning/Engineering

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## **I.9 CITY OF LEMON GROVE STRATEGIES**

Lemon Grove plans to be an example to private land uses within the City by implementing landscape practices, such as Cal-Sense irrigation systems, downspout disconnects, and redirection of parking lot runoff to landscaped areas on municipal property. Other strategies to improve water quality include enhancing MS4 infrastructure maintenance and promoting water efficient landscape BMPs on private property. Strategies and implementation schedules, presented in Table I.9.2, were identified using best information available on efficiency, effectiveness, and level of effort estimated to achieve compliance with numeric goals. The adaptive management process provides the framework to evaluate progress toward meeting the goals and allows for modification of strategies. As strategies are modified, the WQIP is updated. The implementation of each strategy is contingent upon annual budget approvals and funding availability.

Source columns in Table I.9.1 identify how the strategies address major source types. A table summarizing how those columns, and Lemon Grove’s proposed strategies table as a whole, address the high and medium priority sources of bacteria and metals identified in Section 3 of the WQIP is presented below.

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**Table I.9.1  
 Relationship Between Lemon Grove Strategies and Sources**

Known or Suspected Source Type from WQIP Section 3	Appendix I Column Source Category	Notes
Animal Facilities	Animal Facilities	
Automotive	Auto/Equipment Repair	
Eating/Drinking Establishments	Eating/Drinking Establishments	
Equipment Repair	Auto/Equipment Repair	
General Industrial	Industrial	
Institutional	Municipal	
Manufacturing	Industrial	
Metal	Industrial	
Nurseries/Greenhouses	Nurseries/Greenhouses	
Stone/Glass Manufacturing	Industrial	
Storage/Warehousing	Industrial	
Municipal	Municipal	
Residential Areas	Residential	
Homeless Encampments	(No specific source column, see note)	Addressed by strategy LG-38
Sewage Infrastructure & Activities	(No specific source column, see note)	Addressed by strategy LG-23
Roads, Streets, Freeways	(No specific source column, see note)	Addressed by strategies LG-23, LG-24, and LG-36
Brake Pad Wear	(See note)	Already addressed through product replacement legislation. Also indirectly addressed by street sweeping and catch basin cleaning, which remove dust from brake pad wear.
Over-irrigation	(See note)	Addressed by strategies that target commercial, industrial, municipal, and residential categories.
Agriculture	(N/A)	Not present in Lemon Grove, so not addressed by Appendix I strategies.
Septic Tanks	(N/A)	Not present in Lemon Grove, so not addressed by Appendix I strategies.

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**Table I.9.2 City of Lemon Grove  
 Jurisdictional Strategies**

SDB ID	Strategy	Implementation Approach  Frequency of Inspections, B.3.b.(1)(iv) Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii) Triggers, B.3.b.(1)(b)(v) Inventory BMPs, B.3.b.(1)(a)(ii)	Jurisdictional B.3.b.(1)(a) or Optional  B.3.b.(1)(b)	Implementation or Construction Year  B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii)	Implement- ation Schedule  B.3.b.(3)(a) (iv)	Pollutants Addressed										HPWQC Sources (B.3.b(1)(a)(i))						Responsible City Department and Other Collaborating Departments or Agencies  B.3.b.(1)(c)
						Bacteria <sup>1</sup>	Nutrients	Metals <sup>1</sup>	Trash	Sediment	Flow	Habitat/Wildlife	Animal Facilities	Auto/Equipment Repair	Eating/Drinking	Nurseries/Greenhouses	Industrial	Municipal	Residential			
<b>JRMP (Provisions E.2-E.7) Strategies (B.3.b.(1)(a))</b>																						
<b>Development Planning (Provision E.3)</b>																						
<b>All Development Projects</b>																						
LG-1	For all development projects, administer a program to ensure implementation of source control BMPs to minimize pollutant generation at each project and implement LID BMPs to maintain or restore hydrology of the area, where applicable and feasible.	BMPs are required through the permitting process. Examples of BMPs that may be implemented include directing runoff to pervious areas and protecting trash and material storage areas from rain. Additional BMPs are required for Priority Development Projects (PDPs), as described in the PDP strategies below. For more detail on the City's storm water requirements for development projects, see Section 4 of the City's JRMP.	Jurisdictional	FY16	Continuous - Ongoing	x	x	x	x	x	x	x	x	x	x	x	x	x	Planning, Engineering			
LG-2	Update BMP Design Manual and municipal code to require LID site design and source control BMPs.	A new BMP Design Manual is scheduled to go into effect in FY 16. The BMP Design Manual requires development projects to implement LID site design BMPs, which reduce runoff, and source control BMPs, which prevent pollutants from being introduced to runoff.	Jurisdictional	FY16	Continuous - As needed	x	x	x	x	x	x	x	x	x	x	x	x	x	Planning, Engineering			
LG-3	Develop and distribute brochure to encourage downspout disconnection in residential areas.	Lemon Grove will develop and distribute informational brochures to project proponents who come to City Hall to apply for permits.	Jurisdictional	FY16	Continuous - Ongoing	x	x	x		x	x							x	City Manager's Office			
LG-4	Require downspout disconnection and/or other runoff reduction measures, where feasible, for non-Priority Projects.	Required through the building permitting process. Downspout disconnection reduces runoff volumes.	Jurisdictional	FY16	Continuous - Ongoing	x	x	x		x	x		x	x	x	x	x	x	Planning			
LG-5	Trash area standards for new development and redevelopment projects with trash enclosures: require full four-sided enclosure, siting away from storm drains, and structural overhead cover.	Required through the permitting process for new development and redevelopment.	Jurisdictional	FY16	Continuous - Ongoing	x		x	x				x	x	x	x	x	x	Planning			
LG-6	Implement Water Efficient Landscape Ordinance.	Lemon Grove will implement through the permitting process for development projects. These requirements include using efficient irrigation systems and lower water use plants. This strategy helps prevent irrigation runoff.	Jurisdictional	FY16	Continuous - Ongoing	x	x	x		x	x		x	x	x	x	x	x	Planning			

**Table I.9.2 City of Lemon Grove  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  Frequency of Inspections, B.3.b.(1)(a)(iv) Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii) Triggers, B.3.b.(1)(b)(v) Inventory BMPs, B.3.b.(1)(a)(ii)	Jurisdictional B.3.b.(1)(a) or Optional  B.3.b.(1)(b)	Implementation or Construction Year  B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii)	Implementa- tion Schedule  B.3.b.(3)(a) (iv)	Pollutants Addressed										HPWQC Sources (B.3.b(1)(a)(i))						Responsible City Department and Other Collaborating Departments or Agencies  B.3.b.(1)(c)
						Bacteria <sup>1</sup>	Nutrients	Metals <sup>1</sup>	Trash	Sediment	Flow	Habitat/Wildlife	Animal Facilities	Auto/Equipment Repair	Eating/Drinking	Nurseries/Greenhouses	Industrial	Municipal	Residential			
LG-7	Train staff on new BMP Design Manual requirements for development projects.	Staff will be trained on new requirements that apply to development projects, including PDPs, as a result of adopting the new BMP Design Manual. The goal of the training is to result in more effective implementation of the new requirements, including LID implementation.	Jurisdictional	FY16	Continuous - As needed	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Planning, Engineering	
<b>Priority Development Projects (PDPs)</b>																						
LG-8	For PDPs, administer a program requiring implementation of structural BMPs to control pollutants and manage hydromodification. Includes confirmation of design, construction, and maintenance of PDP structural BMPs.	Structural BMPs that reduce pollutants and manage hydromodification are required. These BMPs reduce pollutants from sources of bacteria, like trash areas or animal facilities, and metals, like auto repair facilities, industrial businesses, and parking lots. BMPs are required through the permitting process and are required to be shown on the project's plans. Installation is verified in the field prior to project completion. Refer to JRMP Section 4 for additional details.	Jurisdictional	FY16	Continuous - Ongoing	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Planning, Engineering	
LG-8.1	Administer a program to require structural BMP maintenance.	Parties responsible for maintenance of structural BMPs at completed PDPs are required to complete and sign a form certifying that the structural BMPs are being properly maintained. Direct maintenance inspections will be performed at all high priority projects annually prior to the rainy season. All other projects that do not return a completed annual maintenance verification form will also be inspected.	Jurisdictional	FY16	Continuous - Ongoing	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Storm Water	
LG-9	As part of the BMP Design Manual update, update procedures to determine nature and extent of storm water requirements applicable to development projects and to identify conditions of concern for selecting, designing, and maintaining appropriate structural BMPs.	As part of the BMP Design Manual update, the City will require source control BMPs, such as overhead coverage, to reduce the potential for pollutant transport from trash enclosures at businesses and residential developments and from material storage and work areas at animal facilities, nurseries and garden centers, industrial businesses, and auto-related facilities. BMPs to prevent dry weather discharges from activities such as car washing and landscape irrigation will also be required. These areas or activities have been identified as sources of bacteria and/or metals.	Jurisdictional	FY16	Continuous - As needed	x	x	x	x	x	x		x	x	x	x	x	x	x		Planning, Engineering	

**Table I.9.2 City of Lemon Grove  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  Frequency of Inspections, B.3.b.(1)(a)(iv) Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii) Triggers, B.3.b.(1)(b)(v) Inventory BMPs, B.3.b.(1)(a)(ii)	Jurisdictional B.3.b.(1)(a) or Optional  B.3.b.(1)(b)	Implementation or Construction Year  B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii)	Implemen- tation Schedule  B.3.b.(3)(a) (iv)	Pollutants Addressed							HPWQC Sources (B.3.b(1)(a)(i))						Responsible City Department and Other Collaborating Departments or Agencies  B.3.b.(1)(c)	
						Bacteria <sup>1</sup>	Nutrients	Metals <sup>1</sup>	Trash	Sediment	Flow	Habitat/Wildlife	Animal Facilities	Auto/Equipment Repair	Eating/Drinking	Nurseries/Greenhouses	Industrial	Municipal		Residential
<b>Construction Management (Provision E.4)</b>																				
LG-10	Administer a program to oversee implementation of BMPs during the construction phase of land development. Includes inspections at an appropriate frequency and enforcement of requirements.	Prior to beginning work, projects are required to document proposed BMPs through erosion control plans. Grading permits are not issued and work cannot begin until the submitted grading plan, which includes the erosion control plan, is approved. The City inspects projects during construction to verify that each site is in conformance with the required BMPs. Where deficiencies are noted, the City requires corrections in accordance with its Enforcement Response Plan (See Provision E.6 strategies). During the rainy season, high priority sites are inspected twice per month, medium priority sites are inspected monthly, and low priority sites are inspected as needed. During the dry season, all sites are inspected as needed. All construction sites are required to implement erosion control and sediment control BMPs, which reduce discharges of sediment. Construction sites are also required to properly dispose of trash and debris, which reduces discharges of trash and bacteria, and to maintain secondary containment for portable toilets, which reduces discharges of bacteria. Metal materials are required to be covered and protected from run-on. Refer to JRMP Section 5 and the Stormwater BMP Manual for additional information about the City's construction management program.	Jurisdictional	FY16	Continuous - Ongoing	x		x	x	x					Construction activities	Engineering				
<b>Existing Development (Provision E.5)</b>																				
<b>Commercial, Industrial, Municipal, and Residential Facilities and Areas</b>																				
LG-11	Administer a program to require implementation of minimum BMPs for existing development (commercial, industrial, municipal, and residential) that are specific to the facility, area types, and PGAs, as appropriate. Includes inspection of existing development.	20 percent of industrial and commercial facilities are inspected each year, and all industrial and commercial facilities are inspected at least once every five years. Municipal facility inspection frequencies are the same as the industrial and commercial frequency. Residential management areas are inspected at least once every five years. BMP deficiencies discovered during any of these inspection programs are required to be corrected, in accordance with the procedures in the City's enforcement response plan. BMPs targeted at HPWQCs include waste management (trash, animal waste, used cooking oil, etc.), preventing irrigation runoff, catch basin cleaning, and proper storage of materials containing metals (e.g., at industrial sites and auto shops).	Jurisdictional	FY16	Continuous - Ongoing	x	x	x	x	x	x			x	x	x	x	x	x	Storm Water

**Table I.9.2 City of Lemon Grove  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  <i>Frequency of Inspections, B.3.b.(1)(a)(iv) Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii) Triggers, B.3.b.(1)(b)(v) Inventory BMPs, B.3.b.(1)(a)(ii)</i>	Jurisdictional B.3.b.(1)(a) or Optional  B.3.b.(1)(b)	Implementation or Construction Year  B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii)	Implementa- tion Schedule  B.3.b.(3)(a) (iv)	Pollutants Addressed							HPWQC Sources (B.3.b(1)(a)(i))							Responsible City Department and Other Collaborating Departments or Agencies  B.3.b.(1)(c)
						Bacteria <sup>1</sup>	Nutrients	Metals <sup>1</sup>	Trash	Sediment	Flow	Habitat/Wildlife	Animal Facilities	Auto/Equipment Repair	Eating/Drinking	Nurseries/Greenhouses	Industrial	Municipal	Residential	
LG-12	Update minimum BMPs for existing residential, commercial, and industrial development.	Revised BMP requirements are included in the City's Stormwater BMP Manual (JRMP Appendix B). BMPs targeted at HPWQCs include waste management (trash, animal waste, used cooking oil, etc.), preventing irrigation runoff, and proper storage of materials containing metals (e.g., at industrial sites and auto shops).	Jurisdictional	FY16	Continuous - As needed	x	x	x	x	x	x		x	x	x	x	x	x	Storm Water	
LG-13	Analyze and encourage sweeping of parking lots.	The City will gather more information about existing sweeping frequency for larger commercial parking lots and contact property owners or managers to determine existing sweeping frequencies. If investigation determines that parking lots and private roads are not swept, the City may require sweeping, likely through conditional use permits.	Jurisdictional	FY16	Completed within schedule (FY16)	x	x	x	x	x			Parking lots					City Manager's Office, Planning		
LG-14	Require cooking oil storage BMPs for food service establishments.	Lemon Grove will work with grease rendering services to educate businesses on availability and benefits of indoor grease storage containers. Used cooking oil will be required to be stored indoors or in covered, contained areas for businesses for which outreach efforts were not successful in achieving outcome of having used cooking oil stored in a covered, contained area and at which poor used cooking oil storage BMPs have been observed.	Jurisdictional	FY16	Continuous - Ongoing	x									x				City Manager's Office, Planning, Storm Water	
LG-15	Residential shared outdoor trash storage areas: require full four-sided enclosure, siting away from storm drains, and structural overhead cover when triggered by a building permit application.	Lemon Grove will require retrofit of trash areas at existing multi-family facilities when a building permit is applied for at the same property.	Jurisdictional	FY16	Continuous - Ongoing	x			x	x								x	Planning	
LG-16	Industrial and commercial outdoor trash storage areas: require full four-sided enclosure, siting away from storm drains, and structural overhead cover when triggered by a building permit application.	Lemon Grove will require retrofit of trash areas at existing facilities when a building permit is applied for at the same property.	Jurisdictional	FY16	Continuous - Ongoing	x			x	x			x	x	x	x	x		Planning	

**Table I.9.2 City of Lemon Grove  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  <i>Frequency of Inspections, B.3.b.(1)(a)(iv) Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii) Triggers, B.3.b.(1)(b)(v) Inventory BMPs, B.3.b.(1)(a)(ii)</i>	Jurisdictional B.3.b.(1)(a) or Optional B.3.b.(1)(b)	Implementation or Construction Year  B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii)	Implementa- tion Schedule  B.3.b.(3)(a) (iv)	Pollutants Addressed							HPWQC Sources (B.3.b(1)(a)(i))						Responsible City Department and Other Collaborating Departments or Agencies  B.3.b.(1)(c)
						Bacteria <sup>1</sup>	Nutrients	Metals <sup>1</sup>	Trash	Sediment	Flow	Habitat/Wildlife	Animal Facilities	Auto/Equipment Repair	Eating/Drinking	Nurseries/Greenhouses	Industrial	Municipal	
LG-17	Work with Regional Board to ensure industrial businesses subject to the Industrial General Permit obtain coverage and implement BMPs to address discharges of pollutants associated with TMDLs.	The City will share inspection results with Regional Board staff and notify of non-filers or potential non-compliance with other IGP requirements, especially requirements specifically related to discharges of HPWQCs.	Jurisdictional	FY16	Continuous - Ongoing	x	x	x	x	x						x			Storm Water
LG-18	Pet waste control program.	Lemon Grove will provide pet waste bags via dispensers in City parks.	Jurisdictional	FY16	Continuous - Ongoing	x											x		Public Works
LG-19	Work with water utility (Helix) to publicize incentives for rain barrel installation and turf conversion and/or sprinkler system upgrades (e.g., rain shutoff systems) in residential areas.	The City will collaborate with Helix Water District to educate the public about the requirement to eliminate irrigation runoff and to promote incentives and rebates for landscape or irrigation system retrofits. Preventing irrigation runoff also can prevent the transport of metals and trash deposited along curb gutters and in storm drains, allowing those pollutants to be removed by routine sweeping and catch basin cleaning.	Jurisdictional	FY16	Continuous - Ongoing	x	x	x	x		x							x	Storm Water, Helix Water District
LG-20	Publicize and market any existing outreach and training programs that the water utility (Helix) provides for property managers responsible for homeowner associations (HOAs), multi-family housing developments, and commercial properties. Main focus would be on irrigation runoff reduction.	The City will collaborate with Helix Water District to educate property managers about the requirement to eliminate irrigation runoff and to promote incentives and rebates for landscape or irrigation system retrofits. Preventing irrigation runoff also can prevent the transport of metals and trash deposited along curb gutters and in storm drains, allowing those pollutants to be removed by routine sweeping and catch basin cleaning.	Jurisdictional	FY16	Continuous - Ongoing	x	x	x	x		x								Multi-family residential and commercial Storm Water, Helix Water District

**Table I.9.2 City of Lemon Grove  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  Frequency of Inspections, B.3.b.(1)(a)(iv) Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii) Triggers, B.3.b.(1)(b)(v) Inventory BMPs, B.3.b.(1)(a)(ii)	Jurisdictional B.3.b.(1)(a) or Optional B.3.b.(1)(b)	Implementation or Construction Year  B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii)	Implemen- tation Schedule  B.3.b.(3)(a) (iv)	Pollutants Addressed							HPWQC Sources (B.3.b(1)(a)(i))						Responsible City Department and Other Collaborating Departments or Agencies  B.3.b.(1)(c)
						Bacteria <sup>1</sup>	Nutrients	Metals <sup>1</sup>	Trash	Sediment	Flow	Habitat/Wildlife	Animal Facilities	Auto/Equipment Repair	Eating/Drinking	Nurseries/Greenhouses	Industrial	Municipal	
LG-21	Install smart irrigation controllers at City facilities and convert median landscaping to drip irrigation.	The City has installed 7 Cal-Sense irrigation control systems Citywide and continues to make the transition from area sprinklers to drip irrigation along its medians. The City anticipates installing at least one Cal-Sense system more by 2018. The current locations of the systems are Berry Street Park, Lemon Grove Park, Civic Center Park, City Hall, Kunkel Park, Lemon Grove Avenue median (near Mt. Vernon), and Lemon Grove Avenue median (near Broadway). Preventing irrigation runoff also can prevent the transport of metals and trash deposited along curb gutters and in storm drains, allowing those pollutants to be removed by routine sweeping and catch basin cleaning.	Jurisdictional	FY18	Continuous - As funding allows	x	x	x	x	x							x	Public Works	
<b>MS4 Infrastructure</b>																			
LG-22	Implement operation and maintenance activities for MS4 and related structures for water quality improvement: perform catch basin cleaning.	Catch basins and inlets are inspected at least annually and cleaned if accumulated debris is found. Open channels are also inspected, and trash is removed from open channels where necessary. The City also responds to reports by citizens or municipal staff regarding MS4 facilities that require inspection/cleaning that is beyond regular maintenance activities.	Jurisdictional	FY16	Continuous - Ongoing	x		x	x	x							x	Public Works	
LG-23	Implement controls to prevent infiltration of sewage into the MS4 from leaking sanitary sewers: identify sewer leaks and areas for sewer pipe replacement prioritization.	The City will repair and replace per standard maintenance schedule and where leaks are identified. In addition to routine maintenance, capital projects to replace or upgrade infrastructure are undertaken. The City's Sewer System Management Plan contains more details on these programs and procedures.	Jurisdictional	FY16	Continuous - Ongoing	x	x				x		Sewage infrastructure (note: Lemon Grove has no septic systems)				Public Works		
<b>Roads, Street, and Parking Lots</b>																			
LG-24	Enhance street sweeping through alternating mechanical and vacuum sweepers and route optimization	The City sweeps downtown commercial areas once a week, main arterials and business areas once every two weeks, and residential areas once every four weeks. Sweeping is completed by City contractor (note that only streets with curb and gutter can be swept in the City).	Jurisdictional	FY16	Continuous - Ongoing	x	x	x	x	x			Roads and streets				Public Works		
LG-25	Sweep medians in downtown commercial areas, main arterials, and business areas.	Downtown commercial medians are swept once a week, and median along main arterials and in business areas are swept once every two weeks. Sweeping is completed by City contractor.	Jurisdictional	FY16	Continuous - Ongoing	x	x	x	x	x			Roads and streets				Public Works		

**Table I.9.2 City of Lemon Grove  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  Frequency of Inspections, B.3.b.(1)(a)(iv) Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii) Triggers, B.3.b.(1)(b)(v) Inventory BMPs, B.3.b.(1)(a)(ii)	Jurisdictional B.3.b.(1)(a) or Optional  B.3.b.(1)(b)	Implementation or Construction Year  B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii)	Implemen- tation Schedule  B.3.b.(3)(a) (iv)	Pollutants Addressed								HPWQC Sources (B.3.b(1)(a)(i))					Responsible City Department and Other Collaborating Departments or Agencies  B.3.b.(1)(c)
						Bacteria <sup>1</sup>	Nutrients	Metals <sup>1</sup>	Trash	Sediment	Flow	Habitat/Wildlife	Animal Facilities	Auto/Equipment Repair	Eating/Drinking	Nurseries/Greenhouses	Industrial	Municipal	
<b>Pesticide, Herbicides, and Fertilizer BMP Program</b>																			
LG-26	Require implementation of BMPs to address application, storage, and disposal of pesticides, herbicides, and fertilizers on commercial, industrial, and municipal properties. Includes education, permits, and certifications.	Pesticide application and storage requirements are described in the Stormwater BMP Manual. Pesticide applicators are also subject to a State certification process, and all municipal pesticide application is done by certified individuals.	Jurisdictional	FY16	Continuous - Ongoing		x								Industrial, commercial, and municipal	Storm Water			
<b>Retrofit and Rehabilitation in Areas of Existing Development</b>																			
LG-27	Develop and implement a strategy to identify candidate areas of existing development appropriate for retrofitting projects and facilitate the implementation of such projects.	The retrofit and rehabilitation appendix to the City's JRMP (Appendix E) describes methods for identifying and assessing potential retrofit projects in existing development areas. Retrofit project selection will be based upon a variety of factors including proximity to high priority water quality conditions, potential pollutant load removal effectiveness, and feasibility of implementation. Grants are the most likely funding mechanism. It is also possible that projects could be built as part of an alternative compliance program.	Jurisdictional	FY16	Continuous - Ongoing	x	x	x	x	x	x				Existing development (industrial, commercial, municipal, or residential)	Engineering, Public Works			
LG-28	Develop and implement a strategy to identify candidate areas of existing development for stream, channel, or habitat rehabilitation projects and facilitate implementation of such projects.	The retrofit and rehabilitation appendix to the City's JRMP (Appendix E) describes methods for identifying and assessing potential stream, channel, or habitat rehabilitation projects in existing development areas. Rehabilitation project selection will be based upon a variety of factors including existing stream or habitat degradation, potential future cumulative stream or habitat impacts, and feasibility of implementation. Grants are the most likely funding mechanism. It is also possible that projects could be built as part of an alternative compliance program.	Jurisdictional	FY16	Continuous - Ongoing	x	x	x	x	x	x				Projects located in or along streams or channels	Engineering, Public Works			

**Table I.9.2 City of Lemon Grove  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  Frequency of Inspections, B.3.b.(1)(a)(iv) Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii) Triggers, B.3.b.(1)(b)(v) Inventory BMPs, B.3.b.(1)(a)(ii)	Jurisdictional B.3.b.(1)(a) or Optional  B.3.b.(1)(b)	Implementation or Construction Year  B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii)	Implementa- tion Schedule  B.3.b.(3)(a) (iv)	Pollutants Addressed										HPWQC Sources (B.3.b(1)(a)(i))					Responsible City Department and Other Collaborating Departments or Agencies  B.3.b.(1)(c)
						Bacteria <sup>1</sup>	Nutrients	Metals <sup>1</sup>	Trash	Sediment	Flow	Habitat/Wildlife	Animal Facilities	Auto/Equipment Repair	Eating/Drinking	Nurseries/Greenhouses	Industrial	Municipal	Residential		
<b>Illicit Discharge, Detection, and Elimination (IDDE) Program (Provision E.2)</b>																					
LG-29	Implement Illicit Discharge, Detection, and Elimination (IDDE) Program per the JRMP. Requirements include: maintaining an MS4 map, using municipal personnel and contractors to identify and report illicit discharges, maintaining a hotline for public reporting of illicit discharges, monitoring MS4 outfalls, and investigating and addressing any illicit discharges.	The City's Municipal Code prohibits illicit discharges and illicit connections (IC/ID). All IC/IDs are sources of non-storm water flow and can serve as transport mechanisms for pollutants, including bacteria. IC/IDs can also be direct sources of pollutants. Examples of IC/IDs include the following types of discharges to the MS4: irrigation runoff, power washing, commercial vehicle washing, mop water, wet cleaning of trash enclosures or dumpsters, washing activities as animal facilities, washing off construction equipment, and indoor drains connected to the storm drain system. To identify IC/IDs, the City inspects all its major MS4 outfalls twice per year and operates a public hotline to receive reports from the public and City staff and contractors. The City also identifies IC/IDs during its inspections of existing development (see Provision E.5 strategies) and construction sites (see Provision E.4 strategies). IC/IDs identified through any of these pathways are required to be eliminated per the City's Enforcement Response Plan (see Provision E.6 strategies). Trash accumulation in the MS4 discovered through these programs is removed through infrastructure cleaning (see Provision E.4 strategies). Refer to JRMP Section 3 for additional information about the City's IDDE program.	Jurisdictional	FY16	Continuous - Ongoing	x	x	x	x	x	x	x	x	x	x	x	x	x	Storm Water		
<b>Public Education and Participation (Provisions E.7, B.3.b(1)(a)(iii))</b>																					
LG-30	Implement a public education and participation program to promote and encourage development of programs, management practices, and behaviors that reduce the discharge of pollutants in storm water prioritized by high-risk behaviors, pollutants of concern, and target audiences.	Direct education is provided through interaction with the public through inspections, hotline call response investigations, and plan review comments. Educational materials on a variety of storm water topics are also made available on the City's website. Targeted educational content on HPWQCs, such as messages about used cooking oil storage for eating and drinking establishments (bacteria), is provided. The City also educates residents and businesses about sources of HPWQCs, including waste management, metals storage, and discharge prevention, during inspections (see Provision E.5 strategies) and hotline call response investigations (see Provision E.2 strategy).	Jurisdictional	FY16	Continuous - Ongoing	x	x	x	x	x	x	x	x	x	x	x	x	x	Storm Water		
LG-31	Conduct trash cleanups through community-based organizations involving target audiences.	Lemon Grove collaborates with I Love a Clean San Diego (ILACSD) on trash cleanups.	Jurisdictional	FY16	Continuous - Ongoing	x			x			x	In and adjacent to streams/channels					Storm Water, ILACSD			

**Table I.9.2 City of Lemon Grove  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  Frequency of Inspections, B.3.b.(1)(a)(iv) Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii) Triggers, B.3.b.(1)(b)(v) Inventory BMPs, B.3.b.(1)(a)(ii)	Jurisdictional B.3.b.(1)(a) or Optional B.3.b.(1)(b)	Implementation or Construction Year  B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii)	Implemen- tation Schedule  B.3.b.(3)(a) (iv)	Pollutants Addressed										HPWQC Sources (B.3.b(1)(a)(i))						Responsible City Department and Other Collaborating Departments or Agencies  B.3.b.(1)(c)
						Bacteria <sup>1</sup>	Nutrients	Metals <sup>1</sup>	Trash	Sediment	Flow	Habitat/Wildlife	Animal Facilities	Auto/Equipment Repair	Eating/Drinking	Nurseries/Greenhouses	Industrial	Municipal	Residential			
LG-32	Collaborate with regional education and outreach efforts.	The City contributes to regional education programs run collectively by the Copermittees through a cost-share agreement.	Jurisdictional	FY16	Continuous - Ongoing	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Storm Water, Copermittees
LG-33	Municipal staff training.	Staff are trained on BMP requirements and implementation. Key internal target audiences include Public Works field staff, construction inspectors, and plan reviewers. Training covers BMPs to reduce discharges of HPWQCs, such as proper material storage for metals, waste management BMPs for trash, pet waste management, and catch basin cleaning. Plan review training emphasizes the importance of LID, which is effective for all pollutants.	Jurisdictional	FY16	Continuous - As needed	x	x	x	x	x	x	x									x	Storm Water
<b>Enforcement Response Plan (Provision E.6)</b>																						
LG-34	Implement escalating enforcement responses to compel compliance with statutes, ordinances, permits, contracts, orders, and other requirements for IDDE, development planning, construction management, and existing development in the Enforcement Response Plan.	The City has established the legal authority to require BMP implementation, including preventing illicit discharges, through the Municipal Code. Examples of how enforcement is used to bring about compliance with BMPs that reduce discharges of HPWQCs include preventing illicit discharges (metals, bacteria), requiring proper management of trash areas (bacteria), requiring proper management of metals stored in areas potential exposed to runoff (metals), and requiring maintenance to ensure proper functioning of structural BMPs (bacteria, metals). When noncompliance is noted, the City follows an escalated enforcement process to bring about correction. For example, the City has the authority to issue fines and stop work orders. More details about the City's enforcement process are provided in the enforcement response plan section of the City's Stormwater BMP Manual (JRMP Appendix B).	Jurisdictional	FY16	Continuous - Ongoing	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Storm Water
<b>Non-JRMP Strategies (Optional Strategies, B.3.b(1)(b))</b>																						
<b>Nonstructural</b>																						
LG-35	Increase inspection frequency for highest pollutant potential businesses.	High priority facilities are inspected more than once every five years. The typical inspection frequency is annual. High priority facilities are sites that have been identified as having the potential to be significant sources of HPWQCs (bacteria and/or metals) based on past inspections. Prioritization is based on site-specific evaluation of pollutant discharge potential. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Optional	FY16	Continuous - Ongoing	x		x							x	x	x	x	x		Storm Water	

**Table I.9.2 City of Lemon Grove  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  <i>Frequency of Inspections, B.3.b.(1)(a)(iv)</i> <i>Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)</i> <i>Triggers, B.3.b.(1)(b)(v)</i> <i>Inventory BMPs, B.3.b.(1)(a)(ii)</i>	Jurisdictional B.3.b.(1)(a) or Optional  B.3.b.(1)(b)	Implementation or Construction Year  B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii)	Implementa- tion Schedule  B.3.b.(3)(a) (iv)	Pollutants Addressed							HPWQC Sources (B.3.b(1)(a)(i))						Responsible City Department and Other Collaborating Departments or Agencies  B.3.b.(1)(c)
						Bacteria <sup>1</sup>	Nutrients	Metals <sup>1</sup>	Trash	Sediment	Flow	Habitat/Wildlife	Animal Facilities	Auto/Equipment Repair	Eating/Drinking	Nurseries/Greenhouses	Industrial	Municipal	
LG-36	Enhance street sweeping through use of vacuum street sweeping equipment.	Vacuum street sweepers are used every other sweeping to enhance removal of fine particulates and associated metals and bacteria. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Optional	FY16	Continuous - Ongoing	x		x		x								Roads and streets	Public Works
LG-37	Participate in regional bacteria reference study.	The San Diego Regional Reference Stream Study is currently being conducted by the Southern California Coastal Water Research Project and is funded by all Copermittees, including the City of Lemon Grove. The study is designed to develop numeric targets that account for natural sources to establish the concentrations or loads from streams in a minimally disturbed or "reference" condition. This special study is discussed in more detail in the Monitoring and Assessment Plan. Funding and resources have been secured.	Optional	FY16	Completed within schedule	x	x												Storm Water
LG-38	Support partnership effort by social service providers to provide sanitation and trash management for homeless persons.	Support a non-profit or consortium to provide sanitation services associated with hygiene as well as trash management for persons experiencing homelessness. Rented or purchased shower/sanitary trailers providing mobile showers may be organized at specifically scheduled locations and times. This provision has been proposed as a method for preventing surface water usage for sanitation and bathing, as well as opportunity for outreach and referral by social service agencies. The trash management services will include providing trash bags, trash collection areas, and shower/sanitary facilities at centers which provide daytime shelter to their clients, or on a mobile-basis for known transit camps. This strategy may be implemented at any time at the City's discretion if the following triggers are met: 1) homeless communities are identified as sources of bacteria to the City's MS4 2) funding to address MS4 discharges is identified and secured through a public process, 3) staff resources necessary to coordinate with a regional group are identified and secured, and 4) partners have been identified and formal MOUs have been developed. Projected funding needs may be met through grant funding, support from community groups or other institutions, or the City's General Fund. All General Funds are secured on an annual basis and are contingent upon annual budget approval by City Council. The anticipated cost to implement the strategy is approximately \$10,000 to \$50,000 per year. Once initiated, program development is expected to take at least one year, with implementation following development on a continuous basis as long as funding is available.	Optional	Triggered	Continuous - Ongoing	x	x		x			x						Homeless communities' waste disposal	Public Works

**Table I.9.2 City of Lemon Grove  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  <i>Frequency of Inspections, B.3.b.(1)(a)(iv)</i> <i>Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)</i> <i>Triggers, B.3.b.(1)(b)(v)</i> <i>Inventory BMPs, B.3.b.(1)(a)(ii)</i>	Jurisdictional B.3.b.(1)(a) or Optional  B.3.b.(1)(b)	Implementation or Construction Year  B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii)	Implemen- tation Schedule  B.3.b.(3)(a) (iv)	Pollutants Addressed							HPWQC Sources (B.3.b(1)(a)(i))						Responsible City Department and Other Collaborating Departments or Agencies  B.3.b.(1)(c)
						Bacteria <sup>1</sup>	Nutrients	Metals <sup>1</sup>	Trash	Sediment	Flow	Habitat/Wildlife	Animal Facilities	Auto/Equipment Repair	Eating/Drinking	Nurseries/Greenhouses	Industrial	Municipal	
<b>Structural</b>																			
LG-39	Develop and administer an alternative compliance program to onsite structural BMP implementation.	An alternative compliance program allows development projects to use offsite BMPs or rehabilitation projects to comply with storm water requirements. The City, along with other Copermitees, has funded a Watershed Management Area Analysis and a water quality equivalency standards development process, which are necessary initial steps if an alternative compliance program is to be developed. This strategy may be implemented at any time at the City's discretion if the following triggers are met: 1) The Copermitees finalize water quality equivalency standards and submit it to the Regional Board for approval, 2) the Regional Board approves the water quality equivalency standards, 3) an acceptable framework for allocating credits for offsite BMPs is developed by the Copermitees and approved by the City, 4) the program does not require the City to take on unfunded long-term maintenance responsibility for BMPs used as a means of compliance by private projects, and 5) adequate staffing resources have been obtained. Staffing resources are needed to develop and administer the program. The level of staff administration needed will depend on the number of projects that propose to comply via offsite alternative compliance and the complexity of tracking offsite BMP maintenance. Staffing resources to develop the program are estimated at 0.5 to 1.0 FTE to develop the program initially and 0.25 FTE to administer the program on an ongoing basis. Following the finalization of water quality equivalency and crediting systems on a regional basis, it is anticipated that another one to two years would be needed to develop and implement the program within the City of Lemon Grove.	Optional	Triggered	Continuous - Ongoing	x	x	x	x	x	x	x	x	x	x	x	Planning, Engineering, Copermitees		

**Table I.9.2 City of Lemon Grove  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  <i>Frequency of Inspections, B.3.b.(1)(a)(iv) Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii) Triggers, B.3.b.(1)(b)(v) Inventory BMPs, B.3.b.(1)(a)(ii)</i>	Jurisdictional B.3.b.(1)(a) or Optional  B.3.b.(1)(b)	Implementation or Construction Year  B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii)	Implemen- tation Schedule  B.3.b.(3)(a) (iv)	Pollutants Addressed							HPWQC Sources (B.3.b(1)(a)(i))						Responsible City Department and Other Collaborating Departments or Agencies  B.3.b.(1)(c)
						Bacteria <sup>1</sup>	Nutrients	Metals <sup>1</sup>	Trash	Sediment	Flow	Habitat/Wildlife	Animal Facilities	Auto/Equipment Repair	Eating/Drinking	Nurseries/Greenhouses	Industrial	Municipal	
LG-40	Industrial and commercial outdoor trash storage areas retrofits within the Chollas Creek hydrologic area	Trash area retrofits, which typically include installing overhead coverage and a four-sided enclosure or other mechanism to prevent run-on, are intended to prevent trash, bacteria, and other pollutants from being transported by runoff. This strategy may be implemented at any time at the City's discretion if the following triggers are met: 1) the facility has shown a history of consistent non-compliance for trash area management BMPs and has failed to take appropriate corrective actions, 2) the trash area can be retrofitted in a manner that complies with other requirements (building, planning, fire, etc.), and 3) jurisdictional boundary monitoring shows bacteria exceedances. Resources to complete this strategy include staff time to work with the responsible property owner or manager to see that the additional BMPs are implemented. Once triggered, this strategy could be implemented within approximately one year.	Optional	Triggered	Continuous - Ongoing	x			x	x			x	x	x	x	x		Planning
LG-41	Develop pilot project to identify and carry out directing runoff from existing parking lots or other hardscape to landscaping.	Lemon Grove will complete field work to identify where existing grades would allow parking lots to be directed to landscaping, and the most suitable site(s) will be selected for retrofit. This program focuses on sites in the Chollas Creek hydrologic area. Resources to evaluate sites have been secured based on a preliminary assessment of level of effort needed. It is expected Public Works staff will be able to complete retrofit of suitable site(s) no later than FY17.	Optional	FY16	Completed within schedule (FY17)	x	x	x	x	x	x							x	Public Works
LG-42	Develop pilot project to identify and carry out site downspout disconnections for targeted City facilities.	Lemon Grove will complete field work to identify where downspouts exist and could be directed to landscaping. The most suitable site(s) will be selected for retrofit. This program focuses on sites in the Chollas Creek hydrologic area. Resources to evaluate sites have been secured based on a preliminary assessment of level of effort needed. It is expected Public Works staff will be able to complete retrofit of suitable site(s) no later than FY17.	Optional	FY16	Completed within schedule (FY17)	x	x	x		x	x							x	Public Works

**Table I.9.2 City of Lemon Grove  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  Frequency of Inspections, B.3.b.(1)(a)(iv) Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii) Triggers, B.3.b.(1)(b)(v) Inventory BMPs, B.3.b.(1)(a)(ii)	Jurisdictional B.3.b.(1)(a) or Optional  B.3.b.(1)(b)	Implementation or Construction Year  B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii)	Implemen- tation Schedule  B.3.b.(3)(a) (iv)	Pollutants Addressed							HPWQC Sources (B.3.b(1)(a)(i))					Responsible City Department and Other Collaborating Departments or Agencies  B.3.b.(1)(c)
						Bacteria <sup>1</sup>	Nutrients	Metals <sup>1</sup>	Trash	Sediment	Flow	Habitat/Wildlife	Animal Facilities	Auto/Equipment Repair	Eating/Drinking	Nurseries/Greenhouses	Industrial	
LG-43	Retrofit curb and gutter in selected portions of City to capture and infiltrate or evapotranspire small dry weather flows within the Chollas Creek hydrologic area.	Curb and gutter retrofits, such as curb cuts that allow flows to be directed to landscaping, can help reduce dry weather flows. Preventing irrigation runoff also can prevent the transport of metals and trash deposited along curb gutters and in storm drains, allowing those pollutants to be removed by routine sweeping and catch basin cleaning. This strategy may be implemented at any time at the City's discretion if the following triggers are met: 1) persistent flows are observed at outfalls downstream of the potential retrofit location(s), 2) regular dry weather flow has also been observed at the potential retrofit location(s) and is believed to contribute to the persistent flow at the downstream outfall, 3) enforcement has not been successful at eliminating the source(s) of flow, 4) retrofit is technically feasible at the potential location(s), and 5) funding has been identified to complete the retrofit(s). Each retrofit is expected to cost \$15,000 to \$100,000, depending on the size and technical specifications. Potential funding sources include grants and the City's General Fund. Once triggered, this strategy could be implemented within approximately one year.	Optional	Triggered	Continuous - As needed and as funding allows	x	x	x	x	x						x		Public Works, Engineering
LG-44	Require material storage retrofits/stricter operational controls for sources of metals (copper or zinc) within the Chollas Creek hydrologic area.	Additional BMPs, such as building berms around storage areas and implementing overhead coverage, will be required. This strategy may be implemented at any time at the City's discretion if the following triggers are met: 1) the facility has shown a history of consistent non-compliance with metal storage BMPs and has failed to take appropriate corrective actions, 2) metals stored are likely to be sources of copper or zinc (e.g., galvanized metal), 3) the metals storage area can be retrofitted in a manner that complies with other requirements (building, planning, fire, etc.), and 4) jurisdictional boundary monitoring shows repeated copper or zinc exceedances. City resources to complete this strategy include staff time to work with the responsible property owner or manager to see that the additional BMPs are implemented. Once triggered, this strategy could be implemented within approximately one year.	Optional	Triggered	Continuous - Ongoing			x		x			x			x		Planning

**Table I.9.2 City of Lemon Grove  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  <i>Frequency of Inspections, B.3.b.(1)(a)(iv)</i> <i>Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)</i> <i>Triggers, B.3.b.(1)(b)(v)</i> <i>Inventory BMPs, B.3.b.(1)(a)(ii)</i>	Jurisdictional B.3.b.(1)(a) or Optional  B.3.b.(1)(b)	Implementation or Construction Year  B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii)	Implemen- tation Schedule  B.3.b.(3)(a) (iv)	Pollutants Addressed							HPWQC Sources (B.3.b(1)(a)(i))						Responsible City Department and Other Collaborating Departments or Agencies  B.3.b.(1)(c)
						Bacteria <sup>1</sup>	Nutrients	Metals <sup>1</sup>	Trash	Sediment	Flow	Habitat/Wildlife	Animal Facilities	Auto/Equipment Repair	Eating/Drinking	Nurseries/Greenhouses	Industrial	Municipal	
LG-45	Require parking lot retrofits/stricter operational controls at industrial, commercial, or multi-family residential properties within the Chollas Creek hydrologic area.	Additional BMPs, such as directing runoff to landscaping or filtration systems or using higher efficiency sweeping equipment, will be required for large parking lots. The City has identified the largest parking lots in the City, which are believed to have the highest potential to be sources of metals if BMPs are not implemented. This strategy may be implemented at any time at the City's discretion if the following triggers are met: 1) the facility's parking lot has been identified as a significant source of copper or zinc, despite implementing frequent sweeping (at least twice per month during the wet season) with standard (not vacuum) sweeping equipment, and 2) jurisdictional boundary monitoring shows repeated copper or zinc exceedances. City resources to complete this strategy include staff time to work with the responsible property owner or manager to see that the additional BMPs are implemented. Sampling to assess whether the site is a significant source of copper or zinc may also be necessary. This would require staff time to collect samples and approximately \$50-\$100 per sample for laboratory analyses. Once triggered, this strategy could be implemented within approximately one year.	Optional	Triggered	Continuous - Ongoing			x									Industrial, commercial, multi-family residential		

**Table I.9.2 City of Lemon Grove  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  Frequency of Inspections, B.3.b.(1)(a)(iv) Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii) Triggers, B.3.b.(1)(b)(v) Inventory BMPs, B.3.b.(1)(a)(ii)	Jurisdictional B.3.b.(1)(a) or Optional  B.3.b.(1)(b)	Implementation or Construction Year  B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii)	Implemen- tation Schedule  B.3.b.(3)(a) (iv)	Pollutants Addressed								HPWQC Sources (B.3.b(1)(a)(i))						Responsible City Department and Other Collaborating Departments or Agencies  B.3.b.(1)(c)
						Bacteria <sup>1</sup>	Nutrients	Metals <sup>1</sup>	Trash	Sediment	Flow	Habitat/Wildlife	Animal Facilities	Auto/Equipment Repair	Eating/Drinking	Nurseries/Greenhouses	Industrial	Municipal	Residential	
LG-46	Implement stream, channel, or habitat rehabilitation projects	This strategy may be triggered if 1) interim goals are not met, 2) stream or habitat rehabilitation is determined to be a more effective pathway, relative to additional structural or non-structural BMPs, to meeting the applicable numeric goals, 3) funding and staff resources for the rehabilitation project has been identified and secured, 4) partners have been identified and formal MOUs have been executed, if necessary, 5) permits required by regulatory agencies have been secured, and 6) recommendations from the community have been identified and consensus and community support has been achieved. Will occur in areas identified by local stakeholders or City staff and found to be feasible rehabilitation locations. This could include multi-jurisdictional efforts, such as Chollas Creek Regional Park. The following resources, funds, and steps are needed to implement this strategy if the above triggers are met or at the City's discretion: 1) identify project locations (3-6 months), 2) secure funds in the form of general funds, bonds, and/or grants (6 months-2 years), 3) obtain City Council approval of project budget (occurs annually), 4) initiate preliminary engineering to narrow project scope (6 months; approx \$30,000 per CIP project), 5) hire design consultant to develop detailed construction plans and construction cost estimates (2 years; approx \$500,000 per CIP project), 6) complete construction contractor bid and award process for construction phase (6 months), 7) Construct project (4 months-1 year; project construction costs are TBD and are based on size of the project), 8) secure resources and funding for long-term operation and maintenance costs (ongoing, continuous; cost TBD based on size and nature of the project). Funds and staff resources for this strategy require approval by City Council as part of the City's annual budget.	Optional	Triggered	Continuous - Ongoing	x	x	x	x	x	x	x						Projects located in or along streams or channels	Engineering, Public Works	

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## **I.10 CITY OF NATIONAL CITY STRATEGIES**

The City of National City (National City) is the second oldest city within San Diego County. National City includes diverse land uses from the San Diego Bay inland. Core jurisdictional programs target the entire National City jurisdiction. National City continues to focus on restoration activities within the small Paradise Creek drainage area to improve water quality. A section of the concrete lined channel in Paradise Creek is to be removed and a buffer area around the channel restored to improve riparian habitat. Additionally, upstream of the targeted area, storm water treatment BMPs are intended to improve and sustain improvement of water and riparian habitat quality. Strategies and implementation schedules, presented in Table I.10.1, were identified using best information available on efficiency, effectiveness, and level of effort estimated to achieve compliance with numeric goals. The adaptive management process provides the framework to evaluate progress toward meeting the goals and allows for modification of strategies. As strategies are modified, the WQIP is updated. The implementation of each strategy is contingent upon annual budget approvals and funding availability.

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**Table I.10.1. City of National City  
 Jurisdictional Strategies**

SDB ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed					Focused Priority Sources						Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Habitat/Wildlife*	Trash	Sediment	Concrete Channel Bottom	Non-Native Plants	Commercial Businesses**	Multi-Family Residential	Homeless Population	Roads/Streets	
<b>JRMP (Provisions E.2-E.7) Strategies (B.3.b.(1)(a))</b>																	
<b>Development Planning (Provision E.3)</b>																	
<b>All Development Projects</b>																	
NC-1	For all development projects, administer a program to ensure implementation of source control BMPs to minimize pollutant generation at each project and implement LID BMPs to maintain or restore hydrology of the area, where applicable and feasible.	BMPs are required through the permitting process. Examples of BMPs that may be implemented include directing runoff to pervious areas and protecting trash areas from rain. Additional BMPs are required for Priority Development Projects (PDPs), as described in the PDP strategies below. For more detail on the City's storm water requirements for development projects, see Section 4 of the City's JRMP.	Jurisdictional	FY16	Continuous - Ongoing	x	x	x	x	x							Engineering/ Public Works, Planning & Building
NC-2	Implement Water Efficient Landscape Ordinance.	The City will implement through permitting process for development projects.	Jurisdictional	FY15	Continuous - Ongoing	x	x			x				x	x	x	Planning & Building
NC-3	Trash area standards for new development and redevelopment: require full four-sided enclosure, siting away from storm drains, and structural overhead cover.	New development and redevelopment projects will be required to provide protection for trash areas through the permitting process. Protection of trash areas will minimize the exposure of trash, debris, and leaks (trash, bacteria). Trash enclosures will be inspected upon project development completion and during routine compliance inspections.	Jurisdictional	FY16	Continuous - Ongoing	x		x	x					x	x		Planning & Building

**Table I.10.1 City of National City  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed					Focused Priority Sources						Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Habitat/Wildlife*	Trash	Sediment	Concrete Channel Bottom	Non-Native Plants	Commercial Businesses**	Multi-Family Residential	Homeless Population	Roads/Streets	
NC-4	Train staff on LID regulatory changes and LID Design Manual.	Staff are trained on BMP requirements and implementation. Key internal target audiences include Public Works field staff, construction inspectors, and plan reviewers. Training covers BMPs to reduce pollutants, such as proper material storage, waste management BMPs for trash, pet waste management, and catch basin cleaning. Plan review training emphasizes the importance of LID, which is effective for all pollutants. An initial staff training will take place in FY16. Additional refresher trainings will be provided as needed.	Jurisdictional	FY16	Continuous - As needed	x	x	x	x	x	x	x	x	x	x	x	Engineering/ Public Works, Planning & Building
<b>Priority Development Projects (PDPs)</b>																	
NC-5	For PDPs, administer a program requiring implementation of structural BMPs to control pollutants and manage hydromodification. Includes confirmation of design, construction, and maintenance of PDP structural BMPs.	Structural BMPs that reduce pollutants and manage hydromodification are required. These BMPs reduce pollutants from sources of bacteria, like trash areas or animal facilities, and trash, like commercial businesses or parking lots. BMPs are required through the permitting process and are required to be shown on the project's plans. Structural BMPs using LID techniques like bioretention, infiltration, and rainwater harvesting will be required of PDPs. Installation is verified in the field prior to project completion. Refer to JRMP Section 4 for additional details.	Jurisdictional	FY16	Continuous - Ongoing	x	x	x	x	x			x	x		x	Engineering/ Public Works, Planning & Building

**Table I.10.1 City of National City  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed					Focused Priority Sources						Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))	
						Bacteria	Nutrients	Habitat/Wildlife*	Trash	Sediment	Concrete Channel Bottom	Non-Native Plants	Commercial Businesses**	Multi-Family Residential	Homeless Population	Roads/Streets		Municipal Facilities
NC-6	Administer self-certification program for treatment control BMP compliance.	Responsible parties are annually required to submit verification that BMPs have been maintained. Inspections are completed at high priority projects and projects that do not return proof of maintenance. When deficiencies are noted, corrective maintenance is required. See JRMP Section 4 for more details.	Jurisdictional	FY16	Continuous - Ongoing	x	x	x	x	x			x	x		x	x	Engineering/ Public Works
NC-7	Update BMP Design Manual procedures to determine nature and extent of storm water requirements applicable to development projects and to identify conditions of concern for selecting, designing, and maintaining appropriate structural BMPs.	As part of the BMP Design Manual update, the City will require source control BMPs, such as overhead coverage, to reduce the potential for pollutant transport from trash enclosures at businesses and residential developments. BMPs to prevent dry weather discharges from activities such as landscape irrigation will also be required. These areas or activities have been identified as pollutant sources of bacteria, trash, and sediment.	Jurisdictional	FY16	Continuous - As needed	x	x	x	x	x			x	x		x	x	Engineering/ Public Works, Planning & Building

**Table I.10.1 City of National City  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed					Focused Priority Sources						Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Habitat/Wildlife*	Trash	Sediment	Concrete Channel Bottom	Non-Native Plants	Commercial Businesses**	Multi-Family Residential	Homeless Population	Roads/Streets	
<b>Construction Management (Provision E.4)</b>																	
NC-8	Administer a program to require implementation of BMPs during the construction phase of land development. Includes inspections at an appropriate frequency and enforcement of requirements.	Prior to beginning work, projects are required to document proposed BMPs through erosion control plans. Grading permits are not issued and work cannot begin until the submitted grading plan, which includes the erosion control plan, is approved. The City inspects projects during construction to verify that each site is in conformance with the required BMPs. Where deficiencies are noted, the City requires corrections in accordance with its Enforcement Response Plan (See Provision E.6 strategies). During the rainy season, high priority sites are inspected twice per month, medium priority sites are inspected monthly, and low priority sites are inspected as needed. During the dry season, all sites are inspected as needed. All construction sites are required to implement erosion control and sediment control BMPs, which reduce discharges of sediment. Construction sites are also required to properly dispose of trash and debris, which reduces discharges of trash and bacteria, and to maintain secondary containment for portable toilets, which reduces discharges of bacteria. Refer to JRMP Section 5 and the Storm Water BMP Manual for additional information about the City's construction management program.	Jurisdictional	FY16	Continuous - Ongoing	x		x	x	x					Construction Activities	Engineering/ Public Works	

**Table I.10.1 City of National City  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed					Focused Priority Sources						Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))		
						Bacteria	Nutrients	Habitat/Wildlife*	Trash	Sediment	Concrete Channel Bottom	Non-Native Plants	Commercial Businesses**	Multi-Family Residential	Homeless Population	Roads/Streets		Municipal Facilities	
<b>Existing Development (Provision E.5)</b>																			
<b>Commercial, Industrial, Municipal, and Residential Facilities and Areas</b>																			
NC-9	Administer a program to require implementation of minimum BMPs for existing development (commercial, industrial, municipal, and residential) that are specific to the facility, area types, and PGAs, as appropriate. Includes inspection of existing development at appropriate frequencies and using appropriate methods.	20 percent of industrial and commercial facilities are inspected each year, and all industrial and commercial facilities are inspected at least once every five years. Municipal facility inspection frequencies are the same as the industrial and commercial frequency. Residential management areas are inspected at least once every five years. BMP deficiencies discovered during any of these inspection programs are required to be corrected, in accordance with the procedures in the City's Enforcement Response Plan. BMPs targeted at FPWQCs include waste management (trash, animal waste, used cooking oil, etc.), preventing irrigation runoff, and catch basin cleaning. For example, all businesses and municipal facilities will be required to clean their disposal areas as necessary to prevent trash and debris from entering the storm drain system. Additionally, stored trash and other wastes must be protected from contact with storm water. Parking lots will be required to be swept. Residents will also be required to cover their trash bins and keep their areas free of trash and debris.	Jurisdictional	FY16	Continuous - Ongoing	x	x	x	x	x				x	x			x	Engineering/ Public Works

**Table I.10.1 City of National City  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed					Focused Priority Sources						Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))	
						Bacteria	Nutrients	Habitat/Wildlife*	Trash	Sediment	Concrete Channel Bottom	Non-Native Plants	Commercial Businesses**	Multi-Family Residential	Homeless Population	Roads/Streets		Municipal Facilities
NC-10	Require minimum BMPs for mobile businesses.	Mobile businesses are subject to the same prohibitions and enforcement mechanisms as stationary industrial and commercial facilities. Mobile businesses will be inspected on an as-needed basis and will be in response to incident reports received via the Storm Water Hotline and direct visual observations by City staff. The City will be able to identify "mobile water users" such as mobile detailers, power washers, window cleaners, or similar businesses that use water in their regular business activities who have the potential of discharging pollutants to the storm drain system. Typical activities performed by mobile water users are power washing of trash enclosures, detailing vehicles, and rinsing surfaces of accumulated dirt, which are potential sources of bacteria and sediment. All wash water from these activities will be required to be contained, captured and reused, or disposed of to the sanitary sewer, an appropriate waste hauler, or to landscaping or other pervious surfaces.	Jurisdictional	FY16	Ongoing	x				x								Engineering/ Public Works
NC-11	Implement pet waste program.	The City will provide pet waste bags via dispensers in City parks.	Jurisdictional	FY15	Continuous - Ongoing	x	x										x	Engineering/ Public Works, Community Services

**Table I.10.1 City of National City  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed					Focused Priority Sources						Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))	
						Bacteria	Nutrients	Habitat/Wildlife*	Trash	Sediment	Concrete Channel Bottom	Non-Native Plants	Commercial Businesses**	Multi-Family Residential	Homeless Population	Roads/Streets		Municipal Facilities
NC-12	Require used cooking oil to be either stored indoors or under a structural canopy.	The City's minimum BMPs for industrial and commercial businesses (JRMP Appendix B) requires that food service establishments must store their used cooking oil containers in a manner that prevents any discharge of fats, oils, or grease. National City also will educate businesses on availability and benefits of indoor grease storage containers. This will reduce the potential of bacteria discharges to the storm drain system.	Jurisdictional	FY16	Continuous - Ongoing	x							x					Engineering/ Public Works
NC-13	Notify Regional Board of industrial businesses subject to the Industrial General Permit so that the businesses may obtain coverage as required.	National City will share inspection results with Regional Board staff and notify of non-filers or potential non-compliance with other IGP requirements, especially requirements specifically related to discharges of bacteria, nutrients, trash, and sediment.	Jurisdictional	FY15	Continuous - Ongoing	x	x	x	x	x	Industrial Businesses						Engineering/ Public Works, Regional Board	
<b>MS4 Infrastructure</b>																		
NC-14	Implement operation and maintenance activities (inspection and cleaning) for MS4 and related structures (catch basins, storm drain inlets, channels, detention basins, etc.) for water quality improvement.	Channels and creeks will be cleaned once per month. Trash will be removed from channels by hand. Catch basins will be cleaned to remove trash and debris once per year. Drains with filter inserts (19th Street & Harding, 12th Street & A Avenue, R Avenue between 7th Street & 8th Street, National City Library, Bay Marina Way & Marina Way north & south of the street) will be cleaned four times per year. The City also responds to reports by citizens or municipal staff regarding MS4 facilities that require inspection/cleaning that is beyond regular maintenance activities.	Jurisdictional	FY16	Continuous - Ongoing	x	x	x	x	x			x	x	x	x	x	Engineering/ Public Works

**Table I.10.1 City of National City  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed					Focused Priority Sources						Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))	
						Bacteria	Nutrients	Habitat/Wildlife*	Trash	Sediment	Concrete Channel Bottom	Non-Native Plants	Commercial Businesses**	Multi-Family Residential	Homeless Population	Roads/Streets		Municipal Facilities
NC-15	Install structural BMPs to prevent unauthorized persons from entering the MS4 and to control trash.	Grates will be placed over the entrances to six box culvert locations along Lower Paradise Creek to prevent unauthorized persons from entering and occupying the drainage ways; these grates will also help trap trash. Inspection and maintenance will be conducted by City staff and will be ongoing once installed.	Jurisdictional	FY16	Completed within schedule (FY16)	x	x	x	x				x	x	x	x	x	Engineering/ Public Works
NC-16	Implement controls to prevent infiltration of sewage into the MS4 from leaking sanitary sewers.	The City will repair and replace per standard maintenance schedule and where leaks are identified. In addition to routine maintenance, capital projects to replace or upgrade infrastructure are undertaken. The City's Sewer System Management Plan contains more details on these programs and procedures.	Jurisdictional	FY15	Continuous - Ongoing	x	x										x	Engineering/ Public Works
NC-17	Identify sewer leaks and areas for sewer pipe replacement prioritization.	National City will repair and replace per standard maintenance schedule and where leaks are identified. The City's Sewer System Management Plan contains more details on these programs and procedures.	Jurisdictional	FY15	Continuous - Ongoing	x	x										x	Engineering/ Public Works

**Table I.10.1 City of National City  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed					Focused Priority Sources						Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))	
						Bacteria	Nutrients	Habitat/Wildlife*	Trash	Sediment	Concrete Channel Bottom	Non-Native Plants	Commercial Businesses**	Multi-Family Residential	Homeless Population	Roads/Streets		Municipal Facilities
<b>Roads, Street, and Parking Lots</b>																		
NC-18	Sweep City streets.	Major arterials are swept daily during the work week. All other streets are swept once per week. The City uses both mechanical and vacuum sweepers. Street sweeping personnel are also trained to report and identify obvious illegal connections/discharges to the storm drain system and provides the City with further means to observe, respond to, and potentially prevent illegal connections/discharges.	Jurisdictional	FY15	Continuous - Ongoing	x	x	x	x	x			x	x	x	x	x	Engineering/ Public Works
<b>Pesticide, Herbicides, and Fertilizer BMP Program</b>																		
NC-19	Require implementation of BMPs to address application, storage, and disposal of pesticides, herbicides, and fertilizers on commercial, industrial, and municipal properties. Includes education, permits, and certifications.	Commercial and industrial businesses and residents are subject to application and storage requirements as described in the City's Storm Water BMP Manual (see JRMP Appendix B). These are required through inspections, as described in JRMP Section 6. Municipal BMPs (JRMP Appendix B) are implemented directly by City staff, while pesticide application is done by certified individuals, as described in JRMP Section 8. Users shall apply pesticides and fertilizers in strict accordance with the manufacturer's label, as authorized by the U.S. EPA to minimize the introduction of pollutants to the storm drain system. Chemicals will also be required to be stored in covered and contained areas.	Jurisdictional	FY16	Continuous - Ongoing		x						x	x			x	Engineering/ Public Works

**Table I.10.1 City of National City  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed					Focused Priority Sources						Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Habitat/Wildlife*	Trash	Sediment	Concrete Channel Bottom	Non-Native Plants	Commercial Businesses**	Multi-Family Residential	Homeless Population	Roads/Streets	
<b>Retrofit and Rehabilitation in Areas of Existing Development</b>																	
NC-20	Develop and implement a strategy to identify candidate areas of existing development appropriate for retrofitting projects and facilitate the implementation of such projects.	See multiple retrofit projects described later on down in this list. The retrofit and rehabilitation appendix to the City's JRMP (Appendix E) describes methods for identifying and assessing potential retrofit projects in existing development areas. Retrofit project selection will be based upon a variety of factors including those projects that make progress towards the FPWQCs and WQIP numeric goals, feasibility of the project, total project area of high threat to water quality properties, land use and availability, amount of impervious area, cost effectiveness, and opportunities for infiltration or retention. Grants are the most likely funding mechanism. It is also possible that projects could be built as part of an alternative compliance program.	Jurisdictional	FY16	Continuous - Ongoing	x	x	x	x	x							Engineering/ Public Works
NC-21	Develop and implement a strategy to identify candidate areas of existing development for stream, channel, or habitat rehabilitation projects and facilitate implementation of such projects.	See creek restoration project described later on down in this list. Also refer to JRMP Appendix E which describes the factors in identifying candidate projects. Candidate selection will be based upon a variety of factors including those projects that make progress towards the FPWQCs and WQIP numeric goals, feasibility of the project, multiple benefits of a project, land use and availability, and amount of impervious area. Grants are the most likely funding mechanism. It is also possible that projects could be built as part of an alternative compliance program.	Jurisdictional	FY16	Continuous - Ongoing	x	x				x	x					Engineering/ Public Works

**Table I.10.1 City of National City  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed					Focused Priority Sources						Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))	
						Bacteria	Nutrients	Habitat/Wildlife*	Trash	Sediment	Concrete Channel Bottom	Non-Native Plants	Commercial Businesses**	Multi-Family Residential	Homeless Population	Roads/Streets		Municipal Facilities
<b>Illicit Discharge, Detection, and Elimination (IDDE) Program (Provision E.2)</b>																		
NC-22	Implement Illicit Discharge, Detection, and Elimination (IDDE) Program per the JRMP.	The City's Municipal Code prohibits illicit discharges and illicit connections (IC/ID). All IC/IDs are sources of non-storm water flow and can serve as transport mechanisms for pollutants, including bacteria. IC/IDs can also be direct sources of pollutants. Examples of IC/IDs include the following types of discharges to the MS4: irrigation runoff, power washing, commercial vehicle washing, mop water, wet cleaning of trash enclosures or dumpsters, washing activities as animal facilities, washing off construction equipment, and indoor drains connected to the storm drain system. To identify IC/IDs, the City inspects all its major MS4 outfalls twice per year and operates a public hotline to receive reports from the public and City staff and contractors. The City also identifies IC/IDs during its inspections of existing development (see Provision E.5 strategies) and construction sites (see Provision E.4 strategies). IC/IDs identified through any of these pathways are required to be eliminated per the City's Enforcement Response Plan (see Provision E.6 strategies). Trash accumulation in the MS4 discovered through these programs is removed through infrastructure cleaning (see Provision E.4 strategies). Refer to JRMP Section 3 for additional information about the City's IDDE program.	Jurisdictional	FY16	Continuous - Ongoing	x	x	x	x	x								Engineering/ Public Works

**Table I.10.1 City of National City  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed					Focused Priority Sources						Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))	
						Bacteria	Nutrients	Habitat/Wildlife*	Trash	Sediment	Concrete Channel Bottom	Non-Native Plants	Commercial Businesses**	Multi-Family Residential	Homeless Population	Roads/Streets		Municipal Facilities
<b>Public Education and Participation (Provisions E.7, B.3.b(1)(a)(iii))</b>																		
NC-23	Implement a public education and participation program to promote and encourage development of programs, management practices, and behaviors that reduce the discharge of pollutants in storm water prioritized by high-risk behaviors, pollutants of concern, and target audiences.	Direct education is provided through interaction with the public through inspections, hotline call response investigations, and plan review comments. Educational materials on a variety of storm water topics are also made available on the City's website. Targeted educational content on pollutants, such as messages about used cooking oil storage for eating and drinking establishments (bacteria), is provided. The City also educates residents and businesses about sources of pollutants, including waste management (trash), erosion prevention (sediment), proper fertilizer use (nutrients), and discharge prevention, during inspections (see Provision E.5 strategies) and hotline call response investigations (see Provision E.2 strategy).	Jurisdictional	FY16	Continuous - Ongoing	x	x	x	x	x			x	x				Engineering/ Public Works, Community Services
NC-24	Review City storm water website and identify and implement required updates to reflect WQIP and JRMP revisions.	Website will be updated to inform the public of new and existing requirements for commercial and industrial businesses, residents, and development/redevelopment projects. Educational content will include practices and information that will benefit habitat/wildlife and trash goals.	Jurisdictional	FY16	Ongoing	x	x	x	x	x			x	x				Engineering/ Public Works, Community Services
NC-25	Collaborate with regional education and outreach efforts.	The City contributes to regional outreach efforts done collectively by all Copermittees.	Jurisdictional	FY16	Continuous - Ongoing	x	x	x	x	x	Industrial and commercial businesses, residents						Engineering/ Public Works, Community Services	

**Table I.10.1 City of National City  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed					Focused Priority Sources						Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))		
						Bacteria	Nutrients	Habitat/Wildlife*	Trash	Sediment	Concrete Channel Bottom	Non-Native Plants	Commercial Businesses**	Multi-Family Residential	Homeless Population	Roads/Streets		Municipal Facilities	
NC-26	Collaborate with local water authority to promote and encourage water conservation and irrigation runoff reduction programs, including utility-funded rebate or other incentive programs.	National City will collaborate with Sweetwater Water Authority to educate the public about the requirement to eliminate irrigation runoff and to promote incentives and rebates for landscape or irrigation system retrofits. Collaborative educational material will be distributed to residents and properties as needed.	Jurisdictional	FY15	Continuous - Ongoing	x	x				Industrial and commercial businesses, municipal facilities, residents						Community Services, Sweetwater Water Authority		
NC-27	Provide municipal staff training.	Staff are trained on BMP requirements and implementation. Key internal target audiences include Public Works field staff, construction inspectors, and plan reviewers. Training covers BMPs to reduce discharges of pollutants, such as proper material storage, waste management BMPs for trash, pet waste management, erosion control BMPs, and catch basin cleaning. Plan review training emphasizes the importance of LID, which is effective for all pollutants.	Jurisdictional	FY16	Ongoing	x	x	x	x	x							x	x	Engineering/ Public Works

**Table I.10.1 City of National City  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed					Focused Priority Sources						Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))		
						Bacteria	Nutrients	Habitat/Wildlife*	Trash	Sediment	Concrete Channel Bottom	Non-Native Plants	Commercial Businesses**	Multi-Family Residential	Homeless Population	Roads/Streets		Municipal Facilities	
<b>Enforcement Response Plan (Provision E.6)</b>																			
NC-28	Implement escalating enforcement responses to compel compliance with statutes, ordinances, permits, contracts, orders, and other requirements for IDDE, development planning, construction management, and existing development in the Enforcement Response Plan.	The City has established the legal authority to require BMP implementation, including preventing illicit discharges, through the Municipal Code. Examples of how enforcement is used to bring about compliance with BMPs that reduce discharges of pollutants include preventing illicit discharges (bacteria, trash), requiring proper management of trash areas (bacteria, trash), requiring proper erosion controls for landscaped areas (sediment), and requiring maintenance to ensure proper functioning of structural BMPs (bacteria, trash, sediment). When noncompliance is noted, the City follows an escalated enforcement process to bring about correction. For example, the City has the authority to issue fines and stop work orders. More details about the City's enforcement process are provided in the enforcement response plan section of the City's Storm Water BMP Manual (JRMP Appendix B).	Jurisdictional	FY16	Continuous - Ongoing	x	x	x	x	x	Development projects, construction sites, existing development						Neighborhood Services, Engineering/ Public Works		
<b>Non-JRMP Strategies (Optional Strategies, B.3.b(1)(b))</b>																			
<b>Structural</b>																			
<b>Green Infrastructure</b>																			
<b>Green Streets</b>																			
NC-29	8th Street Smart Growth.	Bioretention areas along 8th Street from approximately Highland Avenue to National City Boulevard. Funding and resources have been secured. Implementation of structural BMP maintenance will be ongoing.	Optional	FY14	Completed within schedule (FY15)	x	x	x	x	x									Engineering/ Public Works

**Table I.10.1 City of National City  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed					Focused Priority Sources						Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))	
						Bacteria	Nutrients	Habitat/Wildlife*	Trash	Sediment	Concrete Channel Bottom	Non-Native Plants	Commercial Businesses**	Multi-Family Residential	Homeless Population	Roads/Streets		Municipal Facilities
NC-30	4th Street Corridor.	Infiltration areas along 4th Street at Clairemont Drive and Belmont Drive. Funding and resources have been secured. Implementation of structural BMP maintenance will be ongoing.	Optional	FY14	Continuous - Ongoing	x	x	x	x	x						x		Engineering/ Public Works
NC-31	"A" Avenue Green Street and Pedestrian Pathway project.	National City is performing green street retrofits for a 49 acre drainage area. Bioretention, infiltration, water harvesting/reuse for irrigation in Kimball Park, and a trash removal device will be installed. This project is funded by Proposition 84 grants awarded to the City and has been a collaboration with the SWRCB. Implementation of structural BMP maintenance will be ongoing upon project completion.	Optional	FY15	Completed within schedule (FY16)	x	x	x	x	x						x	x	Engineering/ Public Works, SWRCB
<b>Multiuse Treatment Areas</b>																		
<b>Stream, Channel and Habitat Rehabilitation Projects</b>																		
NC-32	Kimball Park LID and Paradise Creek Restoration project.	The City will restore approximately 1,000 linear feet of channelized stream with concrete bottom. The concrete bottom will be removed to restore wetland habitat. Approximately 30,000 sq. ft. of native vegetation will be planted along the Creek. The project will also include LID features along streets in the neighborhood to the south of the park and within the park. These LID features will treat an approximately 73 acre tributary drainage area. This project is funded by Proposition 84 grants awarded to the City and has been a collaboration with the SWRCB. Implementation of LID feature maintenance will be ongoing upon project completion.	Optional	FY15	Completed within schedule (FY17)	x	x	x	x	x	x	x	x	x		x	x	Engineering/ Public Works, SWRCB

**Table I.10.1 City of National City  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed					Focused Priority Sources						Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))		
						Bacteria	Nutrients	Habitat/Wildlife*	Trash	Sediment	Concrete Channel Bottom	Non-Native Plants	Commercial Businesses**	Multi-Family Residential	Homeless Population	Roads/Streets		Municipal Facilities	
NC-33	Paradise Creek Educational Park.	Paradise Creek Educational Park is located along Hoover Avenue south of 18th Street and continues south along Paradise Creek to 22nd Street. The project includes removing impervious area, constructing LID, and establishing native vegetation along Paradise Creek. This project will be funded by grants awarded to the City. Construction anticipated to be completed in FY 16 and maintenance would be ongoing after the project has been completed.	Optional	FY15	Continuous - Ongoing	x	x	x	x	x		x					x	x	Engineering/ Public Works, State Council for Strategic Growth, PCEPI
<b>Water Quality Improvement BMPs</b>																			
<b>Proprietary BMPs</b>																			
NC-34	Coolidge Avenue Pedestrian Improvements.	High-rate biofilters (Filterra or equivalent) were installed at Civic Center & Harding, 14th Street & Wilson, and 18th Street & Hoover. Funds and resources have been secured. Construction completed in FY14 and maintenance would be ongoing after the project has been completed.	Optional	FY14	Continuous - Ongoing	x	x	x	x	x							x		Engineering/ Public Works

**Table I.10.1 City of National City  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed					Focused Priority Sources						Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))	
						Bacteria	Nutrients	Habitat/Wildlife*	Trash	Sediment	Concrete Channel Bottom	Non-Native Plants	Commercial Businesses**	Multi-Family Residential	Homeless Population	Roads/Streets		Municipal Facilities
<b>Non-Structural</b>																		
NC-35	Enhance school and recreation-based education and outreach.	The City partners with National School District to put on a storm water quality themed art contest for elementary students. Teachers encourage students to incorporate native plants, animals, and City landmarks, such as Paradise Creek and Sweetwater River. The themes of the calendar, which have included "Keeping the Community Clean" and "A Clean City Starts With you and Me," concentrates on proper trash disposal. The calendar also promotes Winners' artwork is displayed in a storm water educational calendar distributed throughout the City. Winners are also recognized by the City Council.	Optional	FY15	Continuous - Ongoing	x	x	x	x	x	Elementary school students, residents						Engineering/ Public Works, National School District	
NC-36	Increase inspection for highest pollutant potential businesses within the Paradise Creek drainage area	Prioritization is based on site-specific evaluation of pollutant discharge potential. If a site has been identified as having the potential to be significant sources of trash to Paradise Creek and do not drain to structural trash control BMPs, it will be considered high threat to water quality. High threat to water quality facilities are inspected more than once every five years, while the typical inspection frequency is annual. Minimum BMPs that will be assessed include waste management and parking lot and outdoor area housekeeping. City resources to complete the strategy include staff time to implement additional inspections and to work with the responsible property owner or manager to see that the additional BMPs are implemented. Funding and resources have been secured through the industrial and commercial inspection program, which is funded through the City's General Plan.	Optional	FY16	Continuous - Ongoing	x		x	x									Engineering/ Public Works

**Table I.10.1 City of National City  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed					Focused Priority Sources						Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))
						Bacteria	Nutrients	Habitat/Wildlife*	Trash	Sediment	Concrete Channel Bottom	Non-Native Plants	Commercial Businesses**	Multi-Family Residential	Homeless Population	Roads/Streets	
NC-37	Collaborate with Urban Corps of San Diego or other nonprofit groups to remove invasive species.	Significant populations of invasive species are identified in one or more locations in the City. The Urban Corps or other nonprofit groups are equipped to remove the type(s) of invasives discovered. This strategy may be implemented at any time at the City's discretion if the following triggers are met: 1) a project area has been identified, including public input as applicable 2) project scope has been prepared and approved 3) staff resources necessary to coordinate with Urban Corps of San Diego are identified and secured, 4) funds have been secured through grants or City Council approval, 5) funds for any future maintenance of the area are secured, and 6) permits required by regulatory agencies have been secured. The duration of each project depends on the specific scope of each project. Potential funding may be through a grant or departmental maintenance budget.	Optional	Triggered	Continuous - Ongoing						x						Engineering/ Public Works, Urban Corps
NC-38	Conduct trash cleanups through community-based organizations involving target audiences.	Local organizations regularly conduct cleanups, both on their own and in direct partnership with the City. Paradise Creek Educational Park, Inc. (PCEPI) completes regular cleanups in Paradise Creek. The City also regularly works with "I Love a Clean San Diego" to complete creek cleanup near Sweetwater River, which removes accumulated trash from homeless encampments. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Optional	FY16	Continuous - Ongoing	x		x	x							x	Engineering/ Public Works, Community Services, PCEPI, ILACSD

**Table I.10.1 City of National City  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach  (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v)) (Inventory BMPs, B.3.b.(1)(a)(ii))	Jurisdictional (B.3.b.(1)(a)) or Optional (B.3.b.(1)(b))	Implementation or Construction Year (B.3.b.(3)(a)(i); B.3.b.(3)(a)(ii))	Implementation Schedule (B.3.b.(3)(a)(iv))	Pollutants Addressed					Focused Priority Sources						Responsible City Department and Other Collaborating Departments or Agencies (B.3.b.(1)(c))	
						Bacteria	Nutrients	Habitat/Wildlife*	Trash	Sediment	Concrete Channel Bottom	Non-Native Plants	Commercial Businesses**	Multi-Family Residential	Homeless Population	Roads/Streets		Municipal Facilities
NC-38	Contribute to regional effort to provide sanitation and trash management for persons experiencing homelessness.	Support a non-profit or consortium to provide sanitation services associated with hygiene as well as trash management for persons experiencing homelessness. Rented or purchased shower/sanitary trailers providing mobile showers may be organized at specifically scheduled locations and times. This provision has been proposed as a method for preventing surface water usage for sanitation and bathing, as well as opportunity for outreach and referral by social service agencies. The trash management services will include providing trash bags, trash collection areas, and shower/sanitary facilities at centers which provide daytime shelter to their clients, or on a mobile-basis for known transit camps. This strategy may be implemented at any time at the City's discretion if the following triggers are met: 1) homeless communities are identified as sources of bacteria to the City's MS4 2) funding to address MS4 discharges is identified and secured through a public process, 3) staff resources necessary to coordinate with a regional group are identified and secured, and 4) partners have been identified and formal MOUs have been developed. Projected funding needs may be met through grant funding, support from community groups or other institutions, or the City's General Fund. All General Funds are secured on an annual basis and are contingent upon annual budget approval by City Council. The anticipated cost to implement the strategy is approximately \$10,000 to \$50,000 per year. Once initiated, program development is expected to take at least one year, with implementation following development on a continuous basis as long as funding is available.	Optional	Triggered	Continuous - Ongoing	x	x	x	x									Engineering/ Public Works

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## I.11 PORT OF SAN DIEGO STRATEGIES

The Port of San Diego (Port) identified an approach and strategies to address the Highest Priority and Focused Priority Conditions that best suit the characteristics of potential discharges from within its boundaries. The strategies identified by the Port focus on (1) reducing the amount of bacteria, metals, and trash from the Port's MS4, (2) improving water quality, (3) increasing public awareness through education and outreach, and (4) including structural BMPs where feasible. For additional information on the Port's approach to address the highest and focused priority water quality conditions, refer to Sections 4.3.5, 4.6.2.2, 4.7.2.2, and 4.8.2.3. The Port continues to implement its compliance program to address discharges with respect to its MS4 within the Port's boundaries, is updating its program, and has identified new strategies to further assist efforts to address bacteria, trash, and metals jurisdiction-wide and on a targeted basis.

Strategies are presented within three categories: 1) jurisdictional strategies (i.e., minimum permit-required administrative type JRMP updates and permit-required JRMP implementation efforts), 2) non-JRMP strategies (identified as "optional strategies" in the MS4 Permit), and 3) Watershed Management Area (WMA) optional strategies. The MS4 Permit requires the jurisdictions to identify the strategies being implemented as a part of JRMP Provisions E.2 through E.7. These "jurisdictional strategies" are required, but have been tailored to address the sources contributing to the highest and focused priority water quality conditions as appropriate. The optional strategies are either already being implemented, planned for implementation, or may be triggered for implementation in the future to address the highest and focused priority water quality conditions. WMA strategies are those optional strategies that are implemented regionally or by multiple jurisdictions within the San Diego Bay WMA. The WMA strategies have been identified in Sections 4.3.5, 4.6.2.2, 4.7.2.2, and 4.8.2.3 and Table I.11.1. The Port has developed a schedule as a best estimate of the shortest amount of time required to plan and implement the strategies. The fiscal year listed for each strategy in Table I.11.1 represents the shortest practicable time the strategy will be implemented.

The adaptive management process provides the framework to evaluate progress toward meeting the goals and allows for modification of strategies. As strategies are modified, the WQIP is updated. The implementation of each strategy is contingent upon budget and cost considerations and approvals, and technological feasibility.

The Port's approach also integrates with other planning efforts, such as the Port's Climate Action Plan (CAP)<sup>4</sup>. The CAP provides the framework for achieving the Port's goals for the reduction of greenhouse gas (GHG) emissions. The CAP identifies policies and measures, or strategies, to reduce GHG emissions that also provide dual benefits to water quality. CAP strategies that assist the Port in addressing the Highest Priority Conditions and Focused Priority Conditions include water conservation measures and waste

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<sup>4</sup> Port of San Diego's Climate Action Plan (2013)  
([https://www.portofsandiego.org/environment/cleanwater/doc\\_download/5515-port-of-san-diego-climate-action-plan.html](https://www.portofsandiego.org/environment/cleanwater/doc_download/5515-port-of-san-diego-climate-action-plan.html))

reduction and recycling measures (refer to strategies PO-19, PO-20, PO-27, and PO-45 in Table I.11.1).

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
<b>JRMP (E.2-E.7) Strategies (E.3.b.(1)(a))</b>											
<b>Development Projects (including Priority Development Projects)</b>											
PO-1	Implement Core JRMP Program for all development projects to ensure implementation of source control BMPs to minimize pollutant generation at each project and implement LID BMPs to maintain or restore hydrology of the area, where applicable and feasible.	Permit-required strategy to be implemented jurisdiction-wide and continuously throughout permit term. For proposed development projects, the Port will prescribe source control and LID BMP requirements during the project planning process and prior to project approval consistent with the Port BMP Design Manual. Implementation of BMPs will be incorporated into project approvals. Verification of BMP installation will be conducted by Port staff. Refer to JRMP Section 4 and JRMP Appendix D Port BMP Design Manual. Supplemental Attachment 1 lists BMPs that will be implemented as applicable and feasible to address sources causing or contributing to the Highest or Focused Priority Conditions. Optional strategies relating to Development include PO-18, PO-19, PO-20, and PO-47. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by the Port's Board of Commissioners (BPC).	X	X	X	Physical Aesthetics (Trash): General Retail/commercial Areas, General Industrial Areas, Roads and Parking Lots, Parks, Land Development  Swimmable Waters (Bacteria): Sewage (Sanitary/Septic waste management), Over-irrigation/runoff	FY16	Continuous	ELUM FY Budget	\$\$	ELUM, Engineering, REO

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
PO-2	For PDPs, administer a program requiring implementation of structural BMPs to control pollutants and manage hydromodification. Includes confirmation of design, construction, and maintenance of PDP structural BMPs.	Permit-required strategy to be implemented jurisdiction-wide and continuously throughout permit term. For all PDPs, the Port will prescribe treatment control BMP requirements as applicable and feasible during the project planning process and prior to project approval consistent with the Port BMP Design Manual. Implementation of BMPs will be incorporated into project approvals. Verification of BMP installation will be conducted by Port staff. Refer to JRMP Section 4 and JRMP Appendix D Port BMP Design Manual. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by BPC.		X	X	Physical Aesthetics (Trash): General Retail/commercial Areas, General Industrial Areas, Roads and Parking Lots, Parks, Land Development	FY16	Continuous	ELUM FY Budget	\$\$	ELUM, Engineering, REO
PO-3	Train all applicable departments annually on stormwater requirements for all development projects	Permit-required strategy to be implemented jurisdiction-wide and on an annual basis throughout the permit term. The Port will conduct education efforts focusing on new development and redevelopment projects and their relationship to urban runoff impacts on water quality. Topics will also include a discussion on WQIP priority conditions and pollutants. See JRMP Sections 4.7.1 and 9.3.1. Funding and resources have been secured for FY2015. Funding for future fiscal years is contingent on annual budget approval by BPC.	X	X	X	Physical Aesthetics (Trash): General Retail/commercial Areas, General Industrial Areas, Roads and Parking Lots, Parks, Land Development	FY15	Annually	ELUM FY Budget	\$	ELUM

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
PO-4	Conduct project closeout inspection for all development projects to verify that Trash, Metals, and Bacteria BMPs are properly implemented	Permit-required strategy to be implemented jurisdiction-wide and will be conducted on a continuous basis as part of the PDP project closeout inspection. Post construction inspections will be conducted at PDP sites to verify that any and all approved structural BMPs have been installed as approved by the Port. The close-out inspection will also verify that trash, metals, and bacteria BMPs are installed and functioning correctly where applicable. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by BPC.	X	X	X	Physical Aesthetics (Trash): General Retail/commercial Areas, General Industrial Areas, Roads and Parking Lots, Parks, Land Development	FY16	Continuous	ELUM FY Budget	\$	ELUM
PO-5	Provide technical education and outreach to the development community on the design and implementation of the MS4 permit and WQIP requirements	Permit-required strategy to be implemented jurisdiction-wide at least annually. Technical education and outreach to the development community includes outreach on design standards, Port BMP design manual, and WMAA. See JRMP sections 4.7.1, 9.3.11 and 9.3.2.1. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by BPC.	X	X	X	Physical Aesthetics (Trash): General Retail/commercial Areas, General Industrial Areas, Roads and Parking Lots, Parks, Land Development	FY16	Continuous	ELUM FY Budget	\$	ELUM

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
<b>Construction Program</b>											
PO-6	Implement Core JRMP Program to require and to oversee implementation of BMPs during the construction phase of land development. Includes inspections at an appropriate frequency and enforcement of requirements. [SWPPP Review, inspections, BMP Implementation]	Permit-required strategy to be implemented jurisdiction-wide and on a continuous basis. Prior to the approval of a construction project, the Port requires that all applicable minimum and seasonally appropriate BMPs have been identified and the proposed methods of implementation are appropriate to the project site. The review also confirms that minimum BMPs that address WQIP priorities are included. Construction inspections are conducted at a minimum of monthly basis based on assessed threat to water quality. Inspection frequency may increase based on issues of non-compliance with respect to trash, metals, bacteria BMPs. See Supplemental Attachment 1 for details on construction-related BMPs that will be implemented to address sources causing or contributing to the Highest or Focused Priority Conditions. See JRMP Section 5.5 and 5.6, and JRMP Appendix C- Enforcement Response Plan. Optional strategies relating to Construction include PO-18 and PO-20. Funding and resources have been secured for FY2015. Funding for future fiscal years is contingent on annual budget approval by BPC.		X	X	Physical Aesthetics (Trash): General retail/commercial Areas, General Industrial Areas, Roads and Parking Lots, Illegal Dumping, Construction  Swimmable Waters (Bacteria): Over-irrigation/runoff, Sewage (Sanitary/septic waste management), Construction, Roads and Parking Lots	FY15	Continuous	ELUM FY Budget	\$\$	ELUM, Engineering, REO

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
<b>Existing Development</b>											
<b>Commercial / Industrial Facilities</b>											
PO-7	Implement Core JRMP Program for existing development (commercial and industrial facilities) to require implementation of minimum BMPs that are specific to the facility, area types, and PGAs, as appropriate. Includes inspection of existing development at appropriate frequencies and using appropriate methods, maintenance of an existing development inventory, and enforcement.	Permit-required strategy to be implemented jurisdiction-wide and on a continuous basis. The strategy involves implementing the existing development core program, and identifies the minimum BMPs and pollution prevention practices that the Port will require for existing facilities as well as the Port inspection and verification process. For facilities that are not considered a higher priority based upon the WQIP pollutants, inspections will occur at least once during the Permit cycle and at least 20% of the inventoried facilities inspected each year. See JRMP Section 7.5.1 and 7.6.1. See Supplemental Attachment 1 for details on minimum BMPs that will be implemented to address sources causing or contributing to the Highest or Focused Priority Conditions. Annual inspections will be performed at facilities that are determined to be higher sources of trash, metals, and bacteria. See PO-21 for additional information. Other optional strategies relating to Construction include PO-18, PO-20, 44, 45, 47, and 48. Funding and resources have been secured for FY2015. Funding for future fiscal years is contingent on annual budget approval by BPC.	X	X	X	Chollas Creek (Metals/Bacteria): General Industrial  Physical Aesthetics (Trash): General Retail/commercial Areas, General Industrial Areas, Roads and Parking Lots  Swimmable Waters (Bacteria): Over-irrigation/runoff, Commercial, Pet waste, Eating and drinking establishments	FY15	Continuous	ELUM FY Budget	\$\$	ELUM

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
<b>Municipal Areas &amp; Facilities</b>											
PO-8	Implement Core JRMP Program for existing development (municipal facilities) to require implementation of minimum BMPs for municipal facilities that are specific to the facility, area types, and PGAs, as appropriate. Includes inspection of the municipal facilities at appropriate frequencies and using appropriate methods, maintenance of a facility inventory and enforcement.	Permit-required strategy to be implemented jurisdiction-wide and will be on a continuous basis. The strategy involves implementing the existing development core program, and identifies the minimum BMPs and pollution prevention practices that the Port will require for existing facilities as well as the Port inspection and verification process. For facilities that are not considered a higher priority based upon the WQIP pollutants, inspections will occur at least once during the Permit cycle and at least 20% of the inventoried facilities inspected each year. See JRMP Section 6.5 and 6.6. Please see Supplemental Attachment 1 for details on minimum BMPs that will be implemented to address sources causing or contributing to the Highest or Focused Priority Conditions. Annual inspections will be performed at facilities that are determined to be higher sources of trash, metals, and bacteria. See PO-21 for additional information. In addition, Optional strategies relating to municipal facilities include PO-22, PO-23, PO-25, PO-28, PO-46, and PO-47. Funding and resources have been secured for FY2015. Funding for future fiscal years is contingent on annual budget approval by BPC.	X	X	X	Physical Aesthetics (Trash): Homeless, Roads and Parking Lots, Parks, Municipal Facilities  Swimmable Waters (Bacteria): Pet waste, Sewage (Sanitary/septic waste management at parks and special events), Eating and drinking establishments (special events), Parks, Over-irrigation/runoff, Homeless, Roads and Parking Lots	FY15	Continuous	ELUM FY Budget	\$\$	ELUM

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
PO-9	Provide List of BMPs for Special Events with requirements for trash, metals, and bacteria, and ensure compliance thru inspections	Permit-required strategy to be implemented jurisdiction-wide and on a continuous basis. The strategy involves reducing and/or preventing the discharge of high priority pollutants from special events of 500 or more people on Port Tidelands. The strategy involves establishing a set of designated BMPs and conducting inspections to verify compliance. See JRMP Section 6.3.6 and 6.5.1. See Supplemental Attachment 1 for details on minimum BMPs that will be implemented to address sources causing or contributing to the Highest or Focused Priority Conditions. Funding and resources have been secured for FY2015. Funding for future fiscal years is contingent on annual budget approval by BPC.	X	X	X	Physical Aesthetics (Trash): General Retail/commercial Areas, Roads and Parking Lots, Parks  Swimmable Waters (Bacteria): Pet waste, Sewage (Sanitary/septic waste management at special events), Eating and drinking establishments (special events), Roads and Parking Lots	FY15	Continuous	ELUM FY Budget	\$	ELUM, GS
<b>MS4 Infrastructure</b>											
PO-10	Implement Core JRMP Program for MS4 infrastructure (inspection and cleaning) for water quality improvement.	Permit-required strategy to be implemented jurisdiction-wide and on a continuous basis. The core program involves the inspection and cleaning of the MS4 and associated BMPs that the Port owns and operates. It also includes record keeping and tracking of those activities for MS4 infrastructure. See JRMP Section 6.3.5, 6.5.1, and 6.6.4. See Supplemental Attachment 1 for details on MS4-related BMPs that will be implemented to address sources causing or contributing to the Highest or Focused Priority Conditions. In addition, optional strategies relating to the MS4 infrastructure include PO-24, PO-25, PO-28, and 47. Funding and resources have been secured for FY2015. Funding for future fiscal years is contingent on annual budget approval by BPC.	X	X	X	Physical Aesthetics (Trash): General Retail/commercial Areas, General Industrial Areas, Municipal, Roads and Parking Lots.  Swimmable Waters (Bacteria): Sewage infrastructure and activities, Over-irrigation/runoff, Roads and Parking lots, Municipal facilities and parks	FY15	Continuous	ELUM FY Budget	\$\$	ELUM

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
<b>Roads, Streets, and Parking Lots</b>											
PO-11	Implement Core JRMP Program for Street and Parking Lot Maintenance. Includes inspection and cleaning of public streets, paved roads, and parking lots.	Permit-required strategy to be implemented jurisdiction-wide and on a continuous basis. The Port has identified minimum BMPs for streets and parking lot maintenance as well as an inspection process to verify compliance. The Port will conduct annual drive-by inspections of the streets, roads and parking lots that are owned and operated by the Port. Although roads and streets will receive an annual drive-by inspection, Port staff or contractors perform street sweeping on a weekly basis. The Port tracks the areas in which the street sweepers operate and tabulates the number of curb miles swept. See JRMP Sections 6.5.1, 6.6.2 and 6.5.11. See Supplemental Attachment1 for details on BMPs that will be implemented to address sources causing or contributing to the Highest or Focused Priority Conditions. In addition, optional strategies relating to the MS4 infrastructure include PO-24, PO-25, PO-28, PO-29, and PO-47. Funding and resources have been secured for FY2015. Funding for future fiscal years is contingent on annual budget approval by BPC.		X	X	Physical Aesthetics (Trash): General Retail/commercial Areas, General industrial areas, Roads and Parking Lots, Municipal facilities, Parks  Swimmable Waters (Bacteria): Roads and Parking Lots, Parks	FY15	Continuous	ELUM FY Budget	\$	ELUM

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
<b>Pesticide, Herbicides, and Fertilizers BMP Program</b>											
PO-12	Implement Core JRMP Program requiring implementation of BMPs to address application, storage, and disposal of pesticides, herbicides, and fertilizers on commercial, industrial, and municipal properties. Includes education, permits, and certifications.	Permit-required strategy to be implemented jurisdiction-wide and on a continuous basis. The Port has an Integrated Pest Management policy to limit and/or eliminate the use of toxic substances and has developed minimum BMPs to implement to address potential discharges of pesticides, herbicides and fertilizers. See JRMP Sections 6.5.1 and 6.5.14. See Supplemental Attachment1 for details on BMPs that will be implemented to address sources causing or contributing to the Highest or Focused Priority Conditions. Funding and resources have been secured for FY2015. Funding for future fiscal years is contingent on annual budget approval by BPC.	X	X		Commercial, Industrial, and Municipal, Over-irrigation/runoff, Landscaping	FY15	Continuous	ELUM FY Budget	\$	ELUM
<b>Retrofit and Rehabilitation in Areas of Existing Development</b>											
PO-13	Develop and implement a strategy that identifies candidate areas of existing development for retrofit and rehabilitation opportunities to address trash, bacteria, and metals	Permit required administrative update to be implemented jurisdiction-wide and on a continuous basis. The retrofit and rehabilitation strategy will include methods for identifying and assessing potential retrofit projects in existing development areas. Retrofit project selection will be based upon a variety of factors including proximity to highest or focused priority conditions, potential pollutant load removal effectiveness, and feasibility of implementation. See JRMP Section 6.8, 7.8, and JRMP Appendix H. Funding and resources have been secured for FY2015. Funding for future fiscal years is contingent on annual budget approval by BPC.	X	X	X	Physical Aesthetics (Trash): General Retail/commercial Areas, General industrial areas, Development, Municipal facilities, Parks  Swimmable Waters (Bacteria): Eating and drinking establishments; Over-irrigation	FY15	Continuous	ELUM FY Budget	\$	ELUM, GS

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
<b>Illicit Discharge, Detection, and Elimination (IDDE) Program</b>											
PO-14	Implement Core JRMP Program for IDDE program. Requirements include: maintain MS4 map, identify and report illicit discharges, maintain a hotline for public reporting of illicit discharges, monitor MS4 outfalls, and investigate and address any illicit discharges. When sewage is detected, identify source and implement measures to eliminate sources.	Permit-required strategy to be implemented jurisdiction-wide and on a continuous basis. Investigate and eliminate dry weather discharges and illegal connections to the MS4 as reported to the Port or identified by Port staff. Utilize appropriate enforcement actions to achieve compliance such as Administrative Citations with or without fines and corrective actions. See JRMP Chapter 3 and JRMP Appendix C. IDDE related BMPs are also included in the Construction, Development, and Existing Development components of the JRMP. This strategy also relates to PO-15 and PO-16. See Supplemental Attachment 1 for IDDE related BMPs that will address sources causing or contributing to the Highest or Focused Priority Conditions. Funding and resources have been secured for FY2015. Funding for future fiscal years is contingent on annual budget approval by BPC.	X	X	X	Chollas Creek (Metals/Bacteria): General Industrial, Illegal discharges and connections  Physical Aesthetics (Trash): General Retail/commercial Areas, General industrial areas, Development, Illegal Discharges and Connections, Illegal Dumping  Swimmable Waters (Bacteria): Pet waste, Over-irrigation/runoff, Illegal Discharges and Connections, Illegal Dumping	FY15	Continuous	ELUM FY Budget	\$\$-	ELUM
<b>Enforcement Response Plan</b>											
PO-15	Develop and implement the Enforcement Response Plan [escalating enforcement responses; statutes, ordinances, permits, contracts, orders, and other requirements].	Permit required administrative update to be implemented jurisdiction-wide and implemented on a continuous basis. The Plan will include escalated enforcement process for violations from sources related to bacteria, metals, and trash. The strategy also includes an update. See JRMP Appendix G. Funding and resources have been secured for FY2015. Funding for future fiscal years is contingent on annual budget approval by BPC.	X	X	X	Chollas Creek (Metals/Bacteria): General Industrial, Illegal discharges and connections  Physical Aesthetics (Trash): Variable, Illegal discharges and connections  Swimmable Waters (Bacteria): Over-irrigation/runoff, Illegal Discharges and Connections	FY15	continuous	ELUM FY Budget	\$\$-	ELUM

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
PO-16	Update Port's Stormwater Ordinance	Permit required administrative update to be implemented jurisdiction-wide and completed prior to JRMP submittal. The Port's stormwater ordinance to be updated to provide Port legal authority to enforce the JRMP and the requirements of the Permit. See JRMP Section 2.2 and JRMP Appendix B. Funding and resources have been secured for FY2015. Funding for future fiscal years is contingent on annual budget approval by BPC.	X	X	X	Chollas Creek (Metals/Bacteria): General Industrial, Illegal discharges and connections  Physical Aesthetics (Trash): Variable, Illegal discharges and connections  Swimmable Waters (Bacteria): Over-irrigation/runoff, Illegal Discharges and Connections	FY15	One time	ELUM FY Budget	\$	ELUM, Legal

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
<b>Public Education and Participation</b>											
PO-17	Implement Core JRMP Program for Education and Outreach program to promote and encourage development of programs, management practices, and behaviors that reduce the discharge of pollutants in storm water prioritized by high-risk behaviors, pollutants of concern, and target audiences. Staff training: Municipal Development Planning, Municipal Construction Activities, Municipal Industrial/Commercial Activities, Municipal Other Activities Educational Outreach: Industrial & Commercial Owners & Operators; Residential Community & General Public; School Children; Underserved Audiences	Permit-required strategy to be implemented jurisdiction-wide and on a continuous basis. Program will promote public support of the Port's water quality protection efforts through outreach and education as they conduct Port employee-specific training, and promote participation of the public. The education program is tailored towards specific target audiences. Topics will also include a discussion on WQIP priority conditions (trash, metals, and bacteria). The strategies include core jurisdictional programs that meet baseline permit requirements which will be implemented throughout the permit term and strategies that enhance the program or focused efforts. See JRMP Chapter 9. Optional public education and participation strategies include PO-25, PO-31, PO-32, PO-33, PO-35, PO-36, and PO-37. Funding and resources have been secured for FY2015. Funding for future fiscal years is contingent on annual budget approval by BPC.	X	X	X	Chollas Creek (Metals/Bacteria): General Industrial, Residential Community & General Public; School Children; Underserved Audiences  Physical Aesthetics (Trash): General Retail/commercial Areas, General industrial areas, Development, Construction, Municipal facilities, Parks, Residential Community & General Public; School Children; Underserved Audiences  Swimmable Waters (Bacteria): Pet Waste, Sewage (Sanitary/septic waste management at parks and special events), Over- irrigation, Illegal discharges and connections, General Public; School Children; Underserved Audiences	FY15	Continuous	ELUM FY Budget	\$\$-	ELUM

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
<b>Non-JRMP Strategies (Optional Strategies, B.3.b(1)(b))</b>											
<b>Non-structural</b>											
PO-18	Add BMP to construction BMPs that requires covering material stockpiles of treated wood during wet weather	Optional, jurisdictional program enhancement to be implemented jurisdiction-wide and on a continuous basis. Where material stockpiles include treated wood, the concentrated discharge of metals that may be leached from the wood will be minimized by covering the stockpile. See JRMP Section 5.6. Refer to Supplemental Attachment 1 for details on construction-related BMPs that will be implemented to address sources causing or contributing to the Highest or Focused Priority Conditions. This strategy is planned for implementation so no trigger is needed. Funding and resources have been secured for FY2015. Funding for future fiscal years is contingent on annual budget approval by BPC.		X		Physical Aesthetics (Trash): General retail/commercial Areas, General Industrial Areas, Roads and Parking Lots, Illegal Dumping  Swimmable Waters (Bacteria): Over-irrigation/runoff, Sewage (Sanitary/septic waste management), Construction, Roads and Parking Lots	FY15	Continuous	ELUM FY Budget	\$	ELUM, Engineering
PO-19	Require install shutoff irrigation sensors (e.g., Cal-Sense) for MM/CIP development projects. [CAP Water Conservation Measure (WC 1.3)] <sup>2</sup>	Optional, jurisdictional program enhancement to be implemented jurisdiction-wide and as-needed. This strategy will assist in eliminating non-stormwater discharge by requiring the irrigation sensors, where applicable, to development plans. This strategy will be triggered upon identification of new landscape area in Port sponsored major maintenance or capital improvement projects. Funding and resources required include cost for equipment, design, installation and routine maintenance.	X	X	X	Physical Aesthetics (Trash): Municipal facilities, Parks, Development, Construction  Swimmable Waters (Bacteria): Over-irrigation, Municipal facilities, Parks, Construction	FY17	As-needed	Port Major Maintenance or Capital Improvement Budgets	\$\$	REO, Engineering, ELUM, GS

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
PO-20	Adopt Construction and Demolition Recycling Ordinance or include language into general requirements for all projects [CAP Waste Reduction and Recycling Measure (SW2)] <sup>2</sup>	Optional, jurisdictional program enhancement to be implemented jurisdiction-wide and one-time. This strategy will focus on providing direction to development and construction projects regarding how to manage waste and recyclable materials. This strategy will be triggered following an evaluation of potential conflicts with member cities. If member cities have existing ordinances, the Port may elect to follow the corresponding city's ordinance. Funding and resources have been secured for FY2016 and will be requested for FY2017.		X	X	Physical Aesthetics (Trash): Development, Construction	FY17	One-time	ELUM / Eng FY Budget	\$	ELUM, Engineering
PO-21	Perform annual inspection of commercial, industrial, and municipal facilities that are higher sources of trash, metals, and bacteria	Optional, jurisdictional program enhancement to be implemented jurisdiction-wide. The frequency of inspections will be expanded from the baseline frequency (at least once during the permit cycle) to annually for higher sources of trash, metals, and bacteria. Facilities that may have higher sources of trash, metals, and/or bacteria will be identified through standard operating procedures developed by Port staff. The strategy includes ensuring proper implementation of minimum BMPs that are specific to the facility, area types, and Pollutant Generating Areas (PGAs), and, as appropriate; enforcement of violations; and providing education as-needed. This strategy is planned for implementation, so no trigger is needed. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by Port BPC.	X	X	X	Physical Aesthetics (Trash): General Retail/commercial Areas, General industrial areas, Municipal facilities, Parks  Swimmable Waters (Bacteria): Eating and drinking establishments, Sewage (Sanitary/septic waste management at parks and special events), Over- irrigation/runoff, Parks	FY16	Annually	ELUM FY Budget	\$\$	ELUM

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
PO-22	Continue pet waste bag dispensers in parks	Optional, jurisdictional program enhancement to be implemented jurisdiction-wide. The strategy addresses pet waste in municipal areas and includes ensuring proper installation, maintenance, and restocking of dispensers. Port staff will periodically reevaluate the locations of dispensers and where new dispensers may be needed in the future. This strategy is planned for implementation, so no trigger is needed. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by Port BPC.	X			Swimmable Waters (Bacteria): Pet waste, Municipal/Parks	FY15	Annually	GS FY Budget	\$	GS, ELUM
PO-23	Implement Preventative Maintenance (PM) Plan to prevent backups in Municipal public restrooms	Optional, jurisdictional Non-Permit Required JRMP Strategy to be implemented jurisdiction-wide. The strategy includes implementing a janitorial and preventative maintenance services plan for public restrooms to prevent waste material generated from public restroom facilities from entering into storm water conveyance system. This strategy is planned for implementation, so no trigger is needed. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by Port BPC.	X			Swimmable Waters (Bacteria): Sewage infrastructure and activities, Municipal/Parks	FY15	Continuous	GS FY Budget	\$	GS, ELUM

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
PO-24	Development of BMP guidance document for general services staff conducting minor maintenance operations	Optional, jurisdictional program enhancement to be implemented jurisdiction-wide. This strategy will involve the development of a guidance document to help guide General Services staff in implementing the necessary BMPs procedures to mitigate the discharge of contaminated debris, trash, and potential chemicals during minor maintenance and construction activities. The document will provide guidance on selecting the appropriate BMPs, as well as proper BMP implementation, operation, and maintenance. This strategy is planned for implementation, so no trigger is needed. Funding and resources have been secured for FY2016.	X	X	X	Physical Aesthetics (Trash): Roads and Parking Lots, Municipal facilities, Parks  Swimmable Waters (Bacteria): Sewage infrastructure and activities, Over- irrigation/runoff, Municipal facilities, Parks	FY16	One-time	ELUM FY Budget	\$	ELUM, GS
PO-25	Train general services staff on proper BMP implementation during minor maintenance operations	Optional, jurisdictional program enhancement to be implemented jurisdiction-wide. This strategy will involve training General Services staff on the implementation of a BMP guidance document to use as a guide for selecting, implementing, and monitoring BMPs. The training will include guidance on identifying the BMPs to implement to address specific sources of metals, bacteria, and trash associated for each minor maintenance activity. This strategy is planned for implementation, so no trigger is needed. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by Port BPC.	X	X	X	Physical Aesthetics (Trash): Roads and Parking Lots, Municipal facilities, Parks  Swimmable Waters (Bacteria): Sewage infrastructure and activities, Over- irrigation/runoff, Municipal facilities, Parks	FY16	As-needed	ELUM FY Budget	\$	ELUM

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
PO-26	Conduct Trash Receptacle Assessment in municipal areas	Optional, jurisdictional program enhancement to be implemented jurisdiction-wide. This strategy will identify the current waste management practices in municipal facilities and areas (i.e., parks) and determine whether the size, number, and location of the receptacles provided are adequate. Where improvements are required, the assessment will identify potential options to address deficiencies. This strategy is planned for implementation, so no trigger is needed. Funding and resources have been secured for FY2016.	X		X	Physical Aesthetics (Trash): Municipal Facilities, Homeless, Parks  Swimmable Waters (Bacteria): Pet waste, Homeless, Municipal Facilities, Parks	FY16	One-time	ELUM FY Budget	\$	GS, ELUM
PO-27	Develop a process to improve data management for tracking waste and materials diverted from waste stream and landfills [CAP Waste Reduction and Recycling Measure (SW)] <sup>2</sup>	Optional, jurisdictional program enhancement to be implemented jurisdiction-wide. The strategy includes identifying effective and efficient use of trash receptacles that are specific to the area types, pollutant generating activities (PGAs), and/or event, as appropriate. The goal of this strategy is to provide recommendations to be implemented to address the WQIP Focused Priority Conditions (Physical Aesthetics and Swimmable Waters (bacteria)) and the State-led Trash Amendments. This strategy is planned for implementation, so no trigger is needed. Funding for future fiscal years is contingent on annual budget approval by Port BPC.			X	Physical Aesthetics (Trash): Municipal Facilities, Parks	FY17	One-time	ELUM FY Budget	\$	ELUM, GS

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
PO-28	Replace/upgrade current maintenance equipment, such as street sweeper or power washer, to new, more efficient and effective options	Optional, jurisdictional program enhancement to be implemented jurisdiction-wide. This strategy involves the acquisition of maintenance equipment that is more efficient and effective than the equipment currently in use by Port's General Services Department (GSD). Three potential acquisitions include: Vacuum-assisted sweeper machine, Refuse truck, and power washer. Equipment acquisition will be based on the GSD's equipment replacement schedule and the BPC approval of funds. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by Port BPC.	X	X	X	Physical Aesthetics (Trash): General Retail/commercial Areas, General industrial areas, Roads and Parking Lots, Municipal Facilities  Swimmable Waters (Bacteria): Streets and Parking Lots	FY16	Continuous	GS FY Budget	\$\$-\$\$\$	GS
PO-29	Replace all Port owned/leased vehicle brake pads with copper-free brake pads	Optional, jurisdictional program enhancement to be implemented jurisdiction-wide. As copper-free brake pads become commercially available, implement installation of copper-free brake pads on Port owned or leased vehicles to reduce pollution deposition. This strategy will be triggered based on availability of effective copper-free brake pads and equipment replacement schedule. Funding for future fiscal years is contingent on annual budget approval by Port BPC.		X		Chollas Creek (Metals/Bacteria): Brake Pad Wear	FY17	As-needed	GS FY Budget	\$\$	GS, ELUM

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
PO-30	Evaluate MS4 inspection and cleaning locations and adjust as-needed for higher trash generating areas	Optional, jurisdictional program enhancement to be implemented in a phased approach, targeted areas then jurisdiction-wide. This strategy will enhance the current program through an annual jurisdiction-wide evaluation of the inspection and maintenance activities for catch basins, stormwater inlets, and other stormwater conveyance structures the Port of San Diego owns and operates within the Tideland boundary. The annual evaluation of the MS4 program data will enable the Port to identify whether modifications to inspection and/or cleaning activities are needed and to be implemented (i.e., change in frequency or location) to effectively address higher trash generating areas. This strategy is planned for implementation, so no trigger is needed. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by Port BPC.	X	X	X	Physical Aesthetics (Trash): General retail/commercial areas, General industrial areas, Roads and Parking Lots, Municipal Facilities, Parks  Swimmable Waters (Bacteria): Sewage infrastructure and activities, Over-irrigation/runoff, Streets and Parking lots	FY16	Annually	ELUM FY Budget	\$	ELUM
PO-31	Update Power-washing Standard Operating Procedure Manual	Optional, jurisdictional program enhancement to be implemented jurisdiction-wide. This strategy will provide updates to the Port's General Services Department on new requirements and restrictions on power-washing operations. This strategy is planned for implementation, so no trigger is needed. Funding for future fiscal years is contingent on annual budget approval by Port BPC.	X	X		Municipal	FY17	One-time	ELUM FY Budget	\$	GS, ELUM

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
PO-32	Create Standard Operating Procedure for proper washout procedures in public restrooms	Optional, additional Non-Permit Required Jurisdictional Strategy to be implemented jurisdiction-wide. This strategy will create a standard operating procedure, or SOP, for General Services staff and contractors to follow when maintaining public restrooms. This strategy is planned for implementation, so no trigger is needed. Funding for future fiscal years is contingent on annual budget approval by Port BPC.	X			Swimmable Waters (Bacteria): Sewage infrastructure and activities, Municipal/Parks	FY17	One-time	GS FY Budget	\$	GS, ELUM
PO-33	Improve consistency and content of websites to highlight permit requirements and facilitate public reporting	Optional, jurisdictional program enhancement to be implemented jurisdiction-wide. Port staff will regularly evaluate the website content and provide updates to ensure that the information on the website remains current and easy to find. In addition, staff will collaborate with other Copermittees to improve the consistency in messaging and content on agency websites on a watershed and regional level as part of this ongoing activity. This strategy is planned for implementation, so no trigger is needed. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by Port BPC.	X	X	X	Chollas Creek (Metals/Bacteria): General Industrial, Residential Community & General Public; School Children; Underserved Audiences  Physical Aesthetics (Trash): General Retail/commercial Areas, General industrial areas, Development, Construction, Municipal facilities, Parks, Residential Community & General Public; School Children; Underserved Audiences  Swimmable Waters (Bacteria): Pet Waste, Over-irrigation, Illegal discharges and connections, General Public; School Children; Underserved Audiences	FY16	Continuous	MarCom FY Budget	\$	MarCom, ELUM

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
PO-34	Site/Area prioritization study to identify high volume trash areas	Optional, jurisdictional program enhancement to be implemented in a phased, targeted approach then jurisdiction-wide. This study will assist the Port to prioritize areas under its jurisdictional authority that are high volume trash areas to help focus resources and potentially install structural controls, where feasible. This strategy is planned for implementation, so no trigger is needed. Funding and resources have been secured for FY2016.			X	Physical Aesthetics (Trash): Variable	FY16	One-time	ELUM FY Budget	\$\$	ELUM
PO-35	Sponsor, conduct, and host cleanup activities (Operation Clean Sweep, Coastal Cleanup Day, Creek to Bay, etc.). Sponsor regional/watershed collection events for large items or items that may otherwise be illegally dumped.	WMA (Multi-jurisdictional) Optional Program Enhancement to be implemented jurisdiction-wide. The Port will provide funding to sponsor various cleanup events and/or participate by soliciting volunteers, working as site captains, and participating in the cleanup events. Collection events collect large, unwanted household items (e.g., refrigerators, mattresses, etc.), vegetation, and other debris with the intent of preventing illegal dumping of these items in the San Diego Bay WMA. This strategy may be implemented if the following triggers are met: 1) funding to address MS4 discharges is identified and secured, 2) staff resources are identified and secured, and 3) partners have been identified and formal MOUs have been developed, as-needed. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by Port BPC.	X	X	X	Chollas Creek (Metals/Bacteria): Variable; Homeless encampments; Eating and drinking establishments; Illegal dumping  Physical Aesthetics (Trash): Variable, General retail/commercial areas, Homeless, Parks, Waste disposal, Illegal Dumping  Swimmable Waters (Bacteria): Eating and drinking establishments, Homeless, Waste disposal, Parks	FY16	Continuous	ELUM FY Budget / Port Environment al Fund/Grant	\$\$	ELUM, GCR, GS, San Diego Bay RPs, San Diego Port Tenants Association, SD Coastkeeper, ILACSD

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
PO-36	Develop and conduct public perception survey on Physical Aesthetics and Swimmable Waters Conditions	WMA (Multi-jurisdictional) Optional, Additional Non-Permit Required Strategy to be implemented in targeted drainage areas. This strategy will be implemented to understand public opinions about the current status of the focused priority conditions and to help the RPs identify how they may adapt their programs to improve both water quality and public perception. This strategy will be triggered upon final approval on a MOU by all RPs involved, the consultant selection and contract(s), and scope of work. Funds/resources needed for this strategy include staff time and/or consultant expenses to develop and implement the survey.	X		X	Physical Aesthetics (Trash): General retail/commercial areas, General industrial areas, Municipal Facilities, Parks, Illegal Dumping  Swimmable Waters (Bacteria): Pet Waste, Parks, Sewage infrastructure and activities, Over-irrigation/runoff	FY17	Once per Permit Cycle	MarCom or ELUM FY Budget (could be cost shared with other RPs)	\$\$	MarCom, ELUM, San Diego Bay RPs (Chula Vista, Coronado, Imperial Beach)

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
PO-37	Support organizations to address homelessness and to provide resources and educational materials to address trash and bacteria	WMA (Regional) Optional, Additional Non-Permit Required Strategy to be implemented jurisdiction-wide. This strategy involves efforts to research and implement outreach and intervention services through near, medium, and long term strategies to assist the homeless population along the Tidelands, while coordinating efforts at a regional level. This strategy may be implemented if the following triggers are met: 1) funding to address MS4 discharges is identified and secured, 2) staff resources are identified and secured, 3) partners have been identified and formal MOUs have been developed, and 4) consensus and community support has been achieved. Resources necessary to implement this strategy include Port staff to coordinate with the regional effort and consultant or third party assistance to implement project. Projected funding needs may be met through grant funding, support from community groups or other institutions, or the Port's annual budget. Funding is secured on an annual basis and is contingent on annual budget approval by Port BPC.	X		X	Chollas Creek (Metals/Bacteria): Homeless encampments  Physical Aesthetics (Trash): Homeless Encampments, Waste disposal, Illegal Dumping  Swimmable Waters (Bacteria): Homeless, Waste disposal	FY 16	Annually	HPD/GCR FY Budget	\$\$	HPD, GCR, ELUM

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
PO-38	Participation in the San Diego Regional Reference Stream Study [The study will develop numeric targets for minimally disturbed or “reference” condition]	WMA (Regional) Optional, project that focuses on collecting data necessary to derive reasonable and accurate numeric targets for bacteria, nutrients, and heavy metals by referencing natural, local conditions. This study will provide a scientific basis for evaluating bacteria compliance levels in the Bacteria TMDL. The results of this study are used to support the forthcoming reopener of the recently adopted Bacteria TMDL and to support numeric targets in future TMDLs for bacteria, nutrients, and metals. This strategy has been planned for implementation, so no trigger is needed. Funding and resources have been secured for FY2016.	X			Variable	FY15/16	One-time	ELUM FY Budget [Regional Cost Share]	\$	ELUM; Regional MS4 Copermittees (20 other jurisdictions)
PO-39	Participation in the Southern California Coastal Water Research Project’s (SCCWRP) San Diego Bay Trash Study. SCCWRP will initially assess targeted geographic areas and may include (1) assessment of current conditions to provide a baseline to demonstrate progress in the future, (2) identification of high-priority areas for targeted strategy implementation, and (3) identification of commonalities among jurisdictions for potential collaborative outreach opportunities.	WMA (Multi-jurisdictional) Optional, Program Enhancement to be implemented jurisdiction-wide. The Trash Study is a comprehensive bay-wide study to help managers understand the current extent and magnitude of plastic-based debris accumulation and takes into account seasonal changes to better understand the plastic debris conditions throughout San Diego Bay and its upland contributing areas. This strategy has been planned for implementation, so no trigger is needed. Funding and resources were secured for FY2015.			X	Variable	FY15	One-time	ELUM FY Budget [Cost Shared among participants]	\$	ELUM; San Diego Bay RPs (City of Chula Vista and Imperial Beach); SCCWRP

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
PO-40	Delisting feasibility study for Tidelands Park, Coronado	WMA (Multi-jurisdictional) Optional, Non-Permit Required Strategy to be implemented in targeted drainage areas (Tidelands Park, Coronado). The study will assess available historical AB411 monitoring data from the County of San Diego's Department of Environmental Health to determine the number of exceedances of <i>Enterococcus</i> WQOs that have occurred at EH-070 and to identify whether the results warrant consideration of removal of the water body from the SWRCB 303(d) List (i.e., de-listing). This strategy has been planned for implementation, so no trigger is needed. Resources necessary to implement this strategy include Port staff or consulting team. Funding and resources have been secured for FY2016.	X			Swimmable Waters (Bacteria): Pet waste, Sewage (Sanitary/septic waste management at parks and special events), Eating and drinking establishments (special events), Parks, Over-irrigation/runoff, Homeless, Roads and Parking Lots	FY16	One-time	ELUM FY Budget	\$\$-	ELUM, San Diego Bay RP (City of Coronado)
<b>Structural</b>											
PO-41	Install fence along southern parameter of Pond 20 to capture trash and debris	Optional, jurisdictional program, to be implemented in a Specific drainage area (Otay Sub-watershed). The Port of San Diego installed a custom fence to improve the South San Diego site known as Pond 20. The 950-foot fence replaced a chain-link fence and runs within Caltrans' right-of-way along the southern perimeter of the site at 1400 Palm Avenue. Grates were also installed at stormdrain inlets to capture trash and debris. This strategy has been implemented, so no trigger is needed. Funding and resources were secured for FY2015.	X		X	Physical Aesthetics (Trash): Waste Disposal, Illegal Dumping, Homeless, Roads and Parking Lots	FY15	One-time	ENG FY Budget	\$\$\$	ENG, GS, ELUM

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
PO-42	Develop an alternative compliance program framework that provides options for PDPs	Optional, jurisdictional program enhancement to be implemented jurisdiction-wide. The WMAA provides alternative compliance methods in lieu of meeting structural BMP design standards and/or hydromodification management criteria on the project site. The San Diego County Copermittees have collectively funded and provided guidance for development of a regional WMAA. This strategy is planned for implementation, so no trigger is needed. Funding and resources have been secured for FY2016.	X	X	X	Variable	FY16	One time	ELUM FY Budget	\$	ELUM, Engineering, REO, Legal
PO-43	Implement an alternative compliance program providing options for PDPs	Optional, jurisdictional program enhancement to be implemented jurisdiction-wide. Administer an alternative compliance program for on-site structural BMP implementation (includes identifying WMAA candidate projects). This strategy is planned for implementation, so no trigger is needed. Funding for future FY 2017 is contingent on annual budget approval by Port BPC.	X	X	X	Variable	FY17	As-needed	ELUM FY Budget	\$\$	ELUM, Engineering, REO, Legal

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
PO-44	Develop and implement a retrofit program to encourage installation of water conservation measures in existing businesses (e.g. xeriscaping, irrigation sensors, etc.) [CAP Water Conservation Measure (WC 1.3)] <sup>2</sup>	Optional, jurisdictional program enhancement to be implemented in phased, targeted areas then jurisdiction-wide. This strategy involves the development and implementation of the retrofit program to promote water conservation and source abatement. Once the program is developed, Port staff will coordinate with industrial and commercial tenants to voluntarily installing water conservation measures. This strategy will be triggered either by identification of grant funding or may be included as a corrective action for facilities that have repeat violations related to irrigation runoff BMPs. Projected funding needs may be met through grant funding, support from community groups or other institutions, or ELUM's annual budget. All Port funding for future fiscal years is contingent on annual budget approval by Port BPC.	X	X	X	Physical Aesthetics (Trash): General Retail/commercial Areas, General industrial areas  Swimmable Waters (Bacteria): General Retail/commercial Areas; Over-irrigation	FY17	One-time	Env Fund / Grant	\$	ELUM, GS, REO
PO-45	Installation of structural treatment control BMPs in storm drains in high priority areas to address trash, metals, and bacteria	Optional, jurisdictional program to be implemented in phased, targeted areas then jurisdiction-wide. The strategy will address industrial and commercial facilities that have repeat violations for discharges, specifically metals, and bacteria. The facility may be required to install structural treatment control BMPs to reduce or eliminate discharges of pollutants to the MS4 causing or contributing to an impairment of water quality standards. This strategy will be triggered based on facility inspections history, repeat violations and site location and conditions. The industrial or commercial facility tenant will be responsible for providing the necessary funding to implement required systems.	X	X	X	Physical Aesthetics (Trash): General retail/commercial areas, General industrial areas, Homeless, Land Development, Municipal Facilities, Parks  Swimmable Waters (Bacteria): Eating and drinking establishments, Over-irrigation	FY16	As-needed	Tenant	\$	ELUM, REO

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
PO-46	Retrofit trash enclosures, where applicable, in municipal areas	Optional, jurisdictional program enhancement to be implemented in phased, targeted areas then jurisdiction-wide. This strategy will be triggered according to results of PO-26 and PO-34 and identification of the appropriate action to be taken as result of retrofit program. Projected funding needs may be met through grant funding, or ELUM or GS annual budget. Resource needs to implement the project include equipment (i.e., trash receptacles) and staff or contract resources to install and maintain. All Port funding for future fiscal years is contingent on annual budget approval by the BPC.	X		X	Physical Aesthetics (Trash): Homeless, Municipal Facilities, Parks  Swimmable Waters (Bacteria): Pet waste, Parks, Homeless	FY18	As-needed	GS or ELUM FY Budget	\$ -\$\$	ELUM, GS
PO-47	Installation of inlet inserts in storm drains in high priority areas	Optional, additional non-permit required to be implemented in phased, targeted areas then jurisdiction-wide. Trigger is based on results of PO-34 and availability of funding. Projected funding needs may be met through grant funding, or ELUM or GS annual budget. Resource needs to implement the project include equipment (i.e., inlet inserts) and staff or contract resources to install and maintain. All Port funding for future fiscal years is contingent on annual budget approval by Port BPC.	X	X	X	Physical Aesthetics (Trash): General retail/commercial areas, General industrial areas, Homeless, Land Development, Municipal Facilities, Parks  Swimmable Waters (Bacteria): Over-irrigation/runoff, Municipal Facilities, Parks	FY 18	Once	GS or ELUM FY Budget	\$-\$\$	ELUM, GS

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
PO-48	Installation of trash skimmers in marina basins	Optional, non-permit required to be implemented in a phased approach, implemented first in marinas in areas of the Port specified under the Physical Aesthetics Focused Priority Condition, then will assess application jurisdiction-wide. The trash skimmers will help to collect trash and debris found within marina basins. This strategy will be triggered if marinas are identified as high trash generating area in assessment Projected funding needs may be met through grant funding, or ELUM or GS annual budget. All Port funding for future fiscal years is contingent on annual budget approval by Port BPC.			X	Physical Aesthetics (Trash): General retail/commercial areas, Waste disposal	FY 18	One time	ELUM FY budget/ Tenants/ E. Fund	\$\$	ELUM, GS

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
<b>Restoration</b>											
PO-49	Otay District Habitat Improvement (Former South Bay Power Plant)	Optional, non-permit required strategy involving multiple agencies and third parties. Decommission the South Bay Power Plant (completed) in a manner that allows habitat improvements to be performed at the site. Buffer area (25 acres) for habitat enhancements and/or mitigation purposes and will create additional upland transition, intertidal and subtidal habitat. This strategy will be triggered upon completion of the following: 1) Multi-jurisdictional approval of development plans; 2) CEQA review process has been completed; and 3) Approval by California Coastal Commission. Projected funding needs may be met through grant funding, support from community groups or other institutions, or as a potential alternative compliance program candidate project. All Port funding for future fiscal years is contingent on annual budget approval by Port BPC.	X	X	X	Variable	FY 2025	One time	External	\$\$\$\$	Tenants; Developers; City of Chula Vista; Coastal Commission; RWQCB; Army Corp; USFWS; CA Dept. Fish and Wildlife

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
PO-50	Enhance wetland and connections to F and G St marsh and J Street marsh.	Optional, non-permit required strategy involving multiple agencies and third parties. Habitat enhancement of marsh, and associated mudflats and low-lying salt marsh and upland transition areas. Enhance through improved flushing of saltwater marsh currently serviced by a small, ineffective culvert. Enhancement potential: An additional channel, refuge islands, secondary tidal channels, and bay-ward expansion of the marsh. This strategy will be triggered upon completion of the following: 1) Multi-jurisdictional approval of development plans; 2) CEQA review process has been completed; and 3) Approval by California Coastal Commission. Projected funding needs may be met through grant funding, support from community groups or other institutions, or as potential alternative compliance program candidate projects. All Port funding for future fiscal years is contingent on annual budget approval by Port BPC.	X	X	X	Variable	FY 2020	One-time	Grant funding	\$\$\$\$	REO; ELUM; San Diego Natural Wildlife Refuge; Tenants; Developers; City of Chula Vista; Coastal Commission; RWQCB; Army Corp; USFWS; CA Dept. Fish and Wildlife

**Table I.11.1 Port of San Diego  
 Jurisdictional Strategies (continued)**

SDB ID	Strategy	Implementation Approach (Frequency of Inspections, B.3.b.(1)(a)(iv)) (Inventory BMPs, B.3.b.(1)(a)(ii)) (Funds/Resources, B.3.b.(1)(b)(iv), B.3.b.(3)(a)(iii)) (Triggers, B.3.b.(1)(b)(v))	Priority Conditions Addressed by Strategy			Suspected Areas or Sources Causing or May Be Contributing to Highest and/or Focused Priority Conditions (B.3.b(1)(a)(i))	Implementation Year	Frequency of Implementation	Funding Strategy	Cost (Estimated Annual Cost) <sup>1</sup>	Responsible Port Department and Other Collaborating Departments or Agencies
			Bacteria	Metals	Trash						
PO-51	Pond 20 – Site Development Mitigation Banking	Optional WMA -Multi-jurisdictional, non-permit required strategy. The strategy will include the establishment of a mitigation bank while entitling certain parcels for future commercial development. This includes a Port Master Plan Amendment to bring the site into the Port's Coastal Permitting jurisdiction, and setting aside parcels for future commercial development. The strategy involves two different objectives for site development-mitigation banking that focus on habitat conservation and developing the site for commercial purposes. This strategy will be triggered upon completion of the following: 1) the necessary entitlement process is completed; 2) CEQA review process has been completed; and 3) Approval by California Coastal Commission. Any proposed method for moving forward with a mitigation bank would require future approvals from the BPC. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by Port BPC.	X	X	X	Variable	FY2020	One-time	REO FY Budget	\$\$\$\$	REO; ELUM; City of San Diego; City of Imperial Beach

<sup>1</sup> Estimated Cost Range: \$ = \$1,000-25,000; \$\$ = \$26,000 – 200,000; \$\$\$ = \$201,000 – 500,000; \$\$\$\$ = >501,000

<sup>2</sup> CAP - Port of San Diego's Climate Action Plan (2013) ([https://www.portofsandiego.org/environment/clean-water/doc\\_download/5515-port-of-san-diego-climate-action-plan.html](https://www.portofsandiego.org/environment/clean-water/doc_download/5515-port-of-san-diego-climate-action-plan.html))

ELUM – Environmental and Land Use Management; REO – Real Estate Department; GS – General Services Department; Eng – Engineering Department; MarCom – Marketing and Communications Department; GCR – Government and Community Relations Department; HPD – Harbor Police Department; USFWS – United States Fish and Wildlife Service.

**Table I.11.2**  
**Port of San Diego Minimum Best Management Practices (BMPs) for Permit-Required JRMP Strategies**

WQIP Strategy No.	BMP	Pollutant or Condition Addressed			JRMP Section
		Bacteria	Metals	Trash	
<b>Development Projects (Including Priority Development Projects)</b>					<b>4.5</b>
<b>PO-1, PO-2</b>	<b>Source Control BMPs</b>				
	Prevention of illicit discharges into the MS4	x	x	x	
	Storm drain system stenciling or signage	x	x	x	
	Protect outdoor material storage areas from rainfall, run-on, runoff, and wind dispersal	x	x	x	
	Protect trash storage areas from rainfall, runoff, and wind dispersal	x		x	
	<b>Low Impact Development (LID) BMPs</b>				
	Maintenance or restoration of natural storage reservoirs and drainage corridors (including topographic depressions, area of permeable soils, natural swales, and ephemeral and intermittent streams	x	x	x	
	Buffer zones for natural water bodies (where buffer zones are technically infeasible, project applicant is required to include other buffers such as trees, access restrictions etc.)	x	x	x	
	Conservation of natural areas within the project footprint including existing trees, other vegetation, and soils	x	x	x	
	Minimization of the impervious footprint of the project		x	x	
	Disconnection of impervious surfaces through distributed pervious areas		x	x	
	Landscaped or other pervious areas designed or constructed to effectively receive and infiltrate, retain and/or treat runoff from impervious areas, prior to discharging to the MS4	x	x	x	
	Small collection strategies located at, or as close as possible to, the source, (i.e. the point where stormwater initially meets the ground) to minimize the transport of runoff and pollutants to the MS4 and receiving waters	x	x	x	
	Use of permeable materials for projects with low traffic areas and appropriate soil conditions		x	x	
	Collecting and using precipitation	x	x	x	

**Table I.11.2  
 Port of San Diego Minimum Best Management Practices (BMPs) for Permit-  
 Required JRMP Strategies (continued)**

WQIP Strategy No.	BMP	Pollutant or Condition Addressed			JRMP Section
		Bacteria	Metals	Trash	
<b>Construction Program</b>					<b>5.6</b>
<b>PO-8</b>	<b>Non-Stormwater Management</b>				
	Illegal Connection/ Illegal Discharge Detection and Reporting	x	x	x	
	Vehicle and Equipment Cleaning	x	x		
	<b>Good Housekeeping/ Waste Management</b>				
	Cover construction material stockpiles such as treated lumber during wet weather		x		
	Material delivery and storage		x	x	
	Material Use		x	x	
	Solid Waste Management	x		x	
	Spill Prevention and Control	x	x	x	
	Hazardous Waste Management	x	x	x	
	Contaminated Soil Management		x		
	Sanitary/Septic Waste Management	x			
<b>Existing Development</b>					
<b>Commercial, Industrial, and Municipal Areas and Facilities (Including Special Events)</b>					<b>6.5 &amp; 7.5</b>
<b>PO-10, PO-11, PO-20</b>	<b>General Operations and Housekeeping</b>				
	Properly dispose of debris from stormwater conveyance system	x	x	x	
	Conduct outdoor sweeping to adequately control dust and debris			x	
	<b>Non-Stormwater Management</b>				
	Keep site clear of unauthorized non-stormwater discharges including irrigation runoff	x	x	x	
	<b>Waste Handling and Recycling</b>				
	Keep waste containers at acceptable levels (not overflowing)			x	
	Properly dispose of hazardous waste		x		
Keep waste containers covered or lids closed	x				

**Table I.11.2  
 Port of San Diego Minimum Best Management Practices (BMPs) for Permit-  
 Required JRMP Strategies (continued)**

WQIP Strategy No.	BMP	Pollutant or Condition Addressed			JRMP Section
		Bacteria	Metals	Trash	
	<b>Outdoor Material Storage</b>				
	Keep materials closed and secure with proper labels		x	x	
	Minimize outdoor storage areas	x	x	x	
	Keep materials stored under overhead cover or within secondary containment		x		
	<b>Outdoor Drainage from Indoor Activity</b>				
	Keep facility clear from indoor activity being tracked outdoors			x	
	<b>Outdoor Parking</b>				
	Regularly conduct sweeping of parking areas			x	
PO-10, PO-11, PO-20	<b>Vehicles and Equipment</b>				
	Keep facility clear of leaking fluids from vehicles and equipment		x		
	Regularly conduct preventative maintenance on all vehicles and equipment		x		
	Have absorbent booms or spill materials available when fueling vehicles and equipment on-site		x		
	Capture, contain, or treat all vehicle and equipment wash water	x	x		
	<b>Education and Training</b>				
	Train employees in stormwater, spill, response, and pollution prevention	x	x	x	
	<b>Over Water Activities</b>				
	Implement BMPs to prevent discharges from maintenance activities		x	x	
	<b>Outdoor Activity and Operation</b>				
	Capture, contain, or treat all wash water	x	x	x	
<b>MS4 Infrastructure and Roads, Streets, and Parking Lots</b>					<b>6.5</b>
PO-13, PO-14	<b>General Operations and Housekeeping</b>				
	Properly dispose of debris from stormwater conveyance system	x	x	x	
	Conduct outdoor sweeping to adequately control dust and debris			x	
	<b>Non-Stormwater Management</b>				
	Keep site clear of unauthorized non-stormwater discharges including irrigation runoff	x	x	x	

**Table I.11.2  
 Port of San Diego Minimum Best Management Practices (BMPs) for Permit-  
 Required JRMP Strategies (continued)**

WQIP Strategy No.	BMP	Pollutant or Condition Addressed			JRMP Section
		Bacteria	Metals	Trash	
	<b>Education and Training</b>				
	Train employees in stormwater, spill, response, and pollution prevention	x	x	x	
<b>Pesticides, Herbicides, and Fertilizers BMP Program</b>					<b>6.5.14</b>
PO-15	Integrated Pest Management policy to limit and/or eliminate the use of toxic substances	x	x		
	Keep materials stored for use or disposal under overhead cover or within secondary containment	x	x		
	Only Port employees that are specifically trained and certified to apply pesticides, herbicides, or fertilizers are allowed to perform these activities on Port tidelands	x	x		
	Keep site clear of runoff generated from surface washing and irrigation	x	x		
<b>IDDE Related BMPs</b>					<b>Ch. 3</b>
PO-14	<b>Development Projects</b>				<b>4.8</b>
	Prevention of illicit discharges into the MS4	x	x	x	
	Storm drain system stenciling or signage	x	x	x	
	<b>Construction Program</b>				<b>5.9</b>
	Illegal Connection/ Illegal Discharge Detection and Reporting	x	x	x	
PO-14	<b>Commercial, Industrial, and Municipal Areas and Facilities (Including Special Events)</b>				<b>6.7 &amp; 7.7</b>
	Keep site clear of unauthorized non-stormwater discharges including irrigation runoff	x	x	x	
	Train employees in stormwater, spill, response, and pollution prevention	x	x	x	
	Capture, contain, or treat all wash water	x	x	x	
	<b>MS4 Infrastructure and Roads, Streets, and Parking Lots</b>				<b>6.5</b>
	Properly dispose of debris from stormwater conveyance system	x	x	x	
	Keep site clear of unauthorized non-stormwater discharges including irrigation runoff	x	x	x	

**Table I.11.2  
 Port of San Diego Minimum Best Management Practices (BMPs) for Permit-  
 Required JRMP Strategies (continued)**

WQIP Strategy No.	BMP	Pollutant or Condition Addressed			JRMP Section
		Bacteria	Metals	Trash	
	<b>Pesticides, Herbicides, and Fertilizers BMP Program</b>				<b>6.5.14</b>
	Keep site clear of runoff generated from surface washing and irrigation	x	x		

Abbreviations:  
 BMP - Best Management Practice;  
 JRMP - Jurisdictional Runoff Management Program  
 LID - Low Impact Development  
 MS4 - Municipal Separate Stormwater System

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## **I.12 List of Potential Jurisdictional and Watershed Strategies Considered**

This section presents potential jurisdictional and watershed strategies considered as part of the Water Quality Improvement Plan Development Process. Nonstructural strategies are presented in Table I.12.1. Structural strategies are presented in Table I.12.2. In addition to and incorporated within the strategies below, when applicable, the following public comments and considerations presented in Table I.12.3 below were considered as potential strategies and for incorporation within Responsible Party programs, as applicable and appropriate.

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**Table I.12.1  
 Potential Non-Structural Strategies for the San Diego Bay Watershed Management Area**

NONSTRUCTURAL STRATEGY	Reference	Water Chemistry Benefit									Physical and Biological Benefit		
		Bacteria	Metals	Organics	Sediment	Pesticides	Nutrients	Oil and Grease	Dissolved Solids	Gross Pollutants	Flow Rate	Volume Reduction	Habitat/ Wildlife
<b><i>Illicit Discharge, Detection, and Elimination (IDDE) Program</i></b>													
Maintain MS4 map to facilitate IDDE program.	Permit Provision E.2.b(1)	<i>Benefit varies; potential benefit for all conditions.</i>											
Use municipal personnel/contractors to identify and report ICIDs.	Permit Provision E.2.b(2)												
Maintain a hotline and email address for public reporting of potential ICIDs.	Permit Provision E.2.b(3)												
Monitor MS4 outfalls for discharges of potential ICIDs.	Permit Provision E.2.c												
Create and implement a strategy for investigating and addressing ICIDs.	Permit Provision E.2.d												

**Table I.12.1  
 Potential Non-Structural Strategies for the San Diego Bay Watershed Management Area (continued)**

NONSTRUCTURAL STRATEGY	Reference	Water Chemistry Benefit									Physical and Biological Benefit		
		Bacteria	Metals	Organics	Sediment	Pesticides	Nutrients	Oil and Grease	Dissolved Solids	Gross Pollutants	Flow Rate	Volume Reduction	Habitat/ Wildlife
<b>Development Planning</b>													
All development projects: Implement source control BMPs to minimize pollutant generation at each project and implement LID BMPs to maintain or restore hydrology of the area*, where applicable and feasible.	Permit Provision E.3.a	<i>Benefit varies by source control or LID BMP type; refer to Section 2 for a discussion of benefits.</i>											
Enhance LID implementation for new development and redevelopment through zoning amendments.	Enhancement	<i>Benefit varies by LID BMP type; refer to Section 2 for a discussion of benefits.</i>											
Train staff on LID regulatory changes and LID design manual.	Enhancement												
Priority Development Projects: In addition to requirement for all development projects, PDPs must implement onsite structural BMPs to control pollutants and manage hydromodification.*	Permit Provisions E.3.b and E.3.c	<i>Benefit varies by structural BMP type; refer to Section 2 for a discussion of benefits.</i>											
Optional alternative compliance program: Fund projects within the watershed wholly or partially in lieu of onsite structural BMP requirements.*	Permit Provision E.3.c(3)	<i>Benefit varies by watershed project; potential benefit for all conditions.</i>											

**Table I.12.1  
 Potential Non-Structural Strategies for the San Diego Bay Watershed Management Area (continued)**

NONSTRUCTURAL STRATEGY	Reference	Water Chemistry Benefit								Physical and Biological Benefit				
		Bacteria	Metals	Organics	Sediment	Pesticides	Nutrients	Oil and Grease	Dissolved Solids	Gross Pollutants	Flow Rate	Volume Reduction	Habitat/ Wildlife	Aquatic Life
1. Create In-lieu fee	Permit Provision E.3.c(3)													
Update BMP Design Manual procedures to determine nature and extent of storm water requirements applicable to development projects and to identify conditions of concern for selecting, designing, and maintaining appropriate structural BMPs.*	Permit Provision E.3.d	<i>Benefit varies by PGA and BMP Design Manual update.</i>												
1. Amend BMP Design Manual for trash areas to require full four-sided enclosure, siting away from storm drains, cover; consider retrofit requirement.	Permit Provision E.3.d	●	◐	○	○	○	○	◐	○	●	○	○	◐	◐
2. Amend BMP Design Manual for animal-related facilities.	Permit Provision E.3.d	●	○	○	●	●	●	○	○	○	◐	◐	○	◐
3. Amend BMP Design Manual for nurseries and garden centers.	Permit Provision E.3.d	◐	○	●	●	●	○	○	○	◐	◐	○	◐	
4. Amend BMP Design Manual for auto-related uses.	Permit Provision E.3.d	◐	◐	◐	◐	○	○	●	○	●	◐	◐	○	◐

**Table I.12.1  
 Potential Non-Structural Strategies for the San Diego Bay Watershed Management Area (continued)**

NONSTRUCTURAL STRATEGY	Reference	Water Chemistry Benefit									Physical and Biological Benefit			
		Bacteria	Metals	Organics	Sediment	Pesticides	Nutrients	Oil and Grease	Dissolved Solids	Gross Pollutants	Flow Rate	Volume Reduction	Habitat/ Wildlife	Aquatic Life
Implement a program that requires and confirms that PDP structural BMPs are designed, constructed, and maintained to remove pollutants.	Permit Section E.3.e	<i>Benefit varies by structural BMP type: refer to Section 2 for a discussion of benefits.</i>												
<b>Construction Management</b>														
Implement or require implementation of BMPs that are site-specific, seasonally appropriate, and construction-phase appropriate. Includes inspections at an appropriate frequency and enforcement of requirements.	Permit Provisions E.4.c and E.4.d(1)	○	○	○	●	○	○	◐	○	◑	●	●	○	●
<b>Existing Development Management</b>														
Implement or require implementation of minimum BMPs for existing development (commercial, industrial, municipal, and residential), as appropriate. Includes inspection of existing development in accordance with Permit requirements.	Permit Provision E.5.c	<i>Benefit varies by facility, area type and PGA.</i>												
1. Update Minimum BMPs for existing commercial, industrial, municipal, and residential development and enforce them.	Permit Provision E.5.b	<i>Benefit varies by land use and PGA.</i>												

**Table I.12.1  
 Potential Non-Structural Strategies for the San Diego Bay Watershed Management Area (continued)**

NONSTRUCTURAL STRATEGY	Reference	Water Chemistry Benefit									Physical and Biological Benefit			
		Bacteria	Metals	Organics	Sediment	Pesticides	Nutrients	Oil and Grease	Dissolved Solids	Gross Pollutants	Flow Rate	Volume Reduction	Habitat/ Wildlife	Aquatic Life
2. Update and implement inspection and enforcement program in accordance with Permit requirements.	Permit Provisions E.5.c and E.6	●	●	●	●	●	●	●	●	●	●	●	●	●
3. Develop a self-reporting inspection option for select industrial and commercial facilities.	Enhancement	●	●	●	●	●	●	●	●	●	●	●	●	●
4. Identify existing development projects appropriate for retrofit or rehabilitation, such as providing pet waste bag dispensers in parks.*	Permit Provision E.5.e	●	●	●	●	●	●	●	●	●	●	●	●	●
Focus locally on education and enforcement of mobile businesses.	Permit Provisions E.5.a and E.6	●	●	●	●	●	●	●	●	●	●	●	●	●
Identify and reduce incidents of power-washing discharges from non-residential sites and mobile businesses and enforce illicit discharge prohibitions, as necessary.	Permit Provisions E.2.d, E.6	●	●	●	●	●	●	●	●	●	●	●	●	●
Implement operation and maintenance activities (inspection and cleaning) for MS4 and related structures (catch basins, storm drain inlets, detention basins, etc.).	Permit Provision E.5.b(1)	<i>Benefit varies by strategy.</i>												

**Table I.12.1  
 Potential Non-Structural Strategies for the San Diego Bay Watershed Management Area (continued)**

NONSTRUCTURAL STRATEGY	Reference	Water Chemistry Benefit									Physical and Biological Benefit			
		Bacteria	Metals	Organics	Sediment	Pesticides	Nutrients	Oil and Grease	Dissolved Solids	Gross Pollutants	Flow Rate	Volume Reduction	Habitat/ Wildlife	Aquatic Life
1. Optimize catch basin cleaning to maximize pollutant removal.	Permit Provision E.5.b	▶	●	○	●	○	○	○	○	●	○	○	○	▶
2. Proactively repair and replace MS4 components to provide source control from MS4 infrastructure.	Permit Provision E.5.b	▶	●	○	●	○	▶	○	○	○	○	○	○	▶
3. Increase frequency of open-channel cleaning and scour pond repair to reduce pollutant loads.	Permit Provision E.5.b	▶	●	○	●	○	▶	○	○	○	○	○	○	▶
Implement operation and maintenance activities for public streets, unpaved roads, paved roads, and paved highways	Permit Provision E.5.b	▶	●	▶	●	○	●	○	▶	●	○	○	○	▶
1. Enhance street sweeping through equipment replacement and route optimization.	Permit Provision E.5.b	▶	●	▶	●	○	●	○	▶	●	○	○	○	▶
2. Initiate sweeping of medians on high-volume arterial roadways.	Permit Provision E.5.b	▶	●	▶	●	○	●	○	▶	●	○	○	○	▶
Require sweeping of private roads and parking lots in targeted areas.	Enhancement	▶	●	▶	●	○	●	○	▶	●	○	○	○	▶

**Table I.12.1  
 Potential Non-Structural Strategies for the San Diego Bay Watershed Management Area (continued)**

NONSTRUCTURAL STRATEGY	Reference	Water Chemistry Benefit									Physical and Biological Benefit			
		Bacteria	Metals	Organics	Sediment	Pesticides	Nutrients	Oil and Grease	Dissolved Solids	Gross Pollutants	Flow Rate	Volume Reduction	Habitat/ Wildlife	Aquatic Life
Implement controls to prevent infiltration of sewage into the MS4 from leaking sanitary sewers.	Permit Provision E.5.b(1)(c)(iv)	●	○	●	◐	◐	●	○	○	○	○	○	○	◐
1. Identify sewer leaks and areas for sewer pipe replacement prioritization.	Permit Provision E.5.b(1)(c)(iv)	●	○	●	◐	◐	●	○	○	○	○	○	○	◐
Remove pet waste.	Enhancement	●	○	○	○	○	◐	○	○	○	○	○	○	○
Require implementation of BMPs to address application, storage, and disposal of pesticides, herbicides, and fertilizers on commercial, industrial, and municipal properties. Includes education, permits, and certifications.	Permit Provision E.5.b(1)(d)	○	○	●	○	●	●	○	○	○	○	○	◐	●
1. Implement other landscape practices, such as pesticide and fertilizer reduction programs.	Permit Provision E.5.b and E.7.a	○	○	●	○	●	●	○	○	○	○	○	◐	●
2. Municipal BMP: Irrigation Control (Turf Conversion)	Enhancement	◐	◐	◐	◐	●	●	◐	◐	◐	◐	◐	◐	◐

**Table I.12.1  
 Potential Non-Structural Strategies for the San Diego Bay Watershed Management Area (continued)**

NONSTRUCTURAL STRATEGY	Reference	Water Chemistry Benefit									Physical and Biological Benefit			
		Bacteria	Metals	Organics	Sediment	Pesticides	Nutrients	Oil and Grease	Dissolved Solids	Gross Pollutants	Flow Rate	Volume Reduction	Habitat/ Wildlife	Aquatic Life
Promote and encourage implementation of designated BMPs at residential areas.	Permit Provision E.5.b(2)	◐	◐	◐	◐	●	●	◐	◐	◐	◐	◐	◐	◐
1. Expand residential BMP (irrigation, rainwater harvesting, and turf conversion) rebate programs to multi-family housing in target areas.*	Enhancement	◐	◐	◐	◐	●	●	◐	◐	◐	◐	◐	◐	◐
2. Residential BMP: Rain Barrel	Enhancement	◐	◐	◐	◐	●	●	◐	◐	◐	◐	◐	○	◐
3. Residential BMP: Irrigation Control (Turf Conversion)	Enhancement	◐	◐	◐	◐	●	●	◐	◐	◐	◐	◐	○	◐
4. Residential BMP: Downspout Disconnect	Enhancement	◐	◐	◐	◐	●	●	◐	◐	◐	◐	◐	○	◐
5. Develop outreach and training program for property managers responsible for homeowner associations (HOAs) and Maintenance Districts.	Enhancement	◐	◐	◐	◐	●	●	◐	◐	◐	◐	◐	○	◐
Develop a strategy to identify candidate areas of existing development appropriate for retrofitting projects and to facilitate implementing such projects.*	Permit Provision E.5.e(1)	<i>Varies by development area; potential benefit for all conditions.</i>												

**Table I.12.1  
 Potential Non-Structural Strategies for the San Diego Bay Watershed Management Area (continued)**

NONSTRUCTURAL STRATEGY	Reference	Water Chemistry Benefit								Physical and Biological Benefit			
		Bacteria	Metals	Organics	Sediment	Pesticides	Nutrients	Oil and Grease	Dissolved Solids	Gross Pollutants	Flow Rate	Volume Reduction	Habitat/ Wildlife
Develop a strategy to identify candidate areas of existing development for stream, channel, and/or habitat rehabilitation projects and to facilitate implementing such projects.	Permit Provision E.5.e(2)	<i>Varies by development area; potential benefit for all conditions.</i>											
<b>Enforcement Response Plans</b>													
Implement escalating enforcement responses to compel compliance with statutes, ordinances, permits, contracts, orders, and other requirements for IDDE, development planning, construction management, and existing development in the Enforcement Response Plan.*	Permit Section E.6	<i>Varies by program.</i>											
1. Increase enforcement to avoid over-irrigation .	MS4 Permit E.6	●	●	●	●	●	●	●	●	●	●	○	●

**Table I.12.1  
 Potential Non-Structural Strategies for the San Diego Bay Watershed Management Area (continued)**

NONSTRUCTURAL STRATEGY	Reference	Water Chemistry Benefit									Physical and Biological Benefit			
		Bacteria	Metals	Organics	Sediment	Pesticides	Nutrients	Oil and Grease	Dissolved Solids	Gross Pollutants	Flow Rate	Volume Reduction	Habitat/ Wildlife	Aquatic Life
<b>Public Education and Participation</b>														
Implement a public education and participation program to promote and encourage development of programs, management practices, and behaviors that reduce the discharge of pollutants in storm water prioritized by high-risk behaviors, pollutants of concern, and target audiences.	MS4 Permit, Section E.7	<i>Varies by program.</i>												
1. Expand outreach to HOA common lands and HOA rebates.	Permit Provision E.7.a	◐	◐	◐	◐	●	●	◐	◐	◐	◐	◐	○	◐
2. Develop outreach and training program for property managers responsible for HOAs and Maintenance Districts.	Permit Provision E.7.a	◐	◐	◐	◐	●	●	◐	◐	◐	◐	◐	○	◐
3. Conduct trash cleanups through community-based organizations involving target audiences.*	Permit Provision E.7.a	◐	◐	◐	○	◐	○	◐	○	●	○	○	●	◐
4. Improve consistency and content of websites to highlight enforceable conditions and reporting methods.	Permit Provision E.7.a	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐

**Table I.12.1  
 Potential Non-Structural Strategies for the San Diego Bay Watershed Management Area (continued)**

NONSTRUCTURAL STRATEGY	Reference	Water Chemistry Benefit									Physical and Biological Benefit			
		Bacteria	Metals	Organics	Sediment	Pesticides	Nutrients	Oil and Grease	Dissolved Solids	Gross Pollutants	Flow Rate	Volume Reduction	Habitat/ Wildlife	Aquatic Life
5. Contribute to San Diego County-led effort through regional education group for outreach, education, and policy measures for the equestrian community and property owners.	Permit Provision E.7.a	●	○	○	◐	○	◐	○	○	○	○	○	○	◐
6. Develop a targeted education and outreach program for homeowners adjacent to or with tributaries or streams within their property (may be combined with Residential Management Area inspections).	Enhancement	●	◐	◐	●	◐	◐	◐	◐	◐	◐	◐	●	◐
<b>Optional Jurisdiction-Specific Strategies<sup>2</sup></b>														
Support partnership effort by social service providers to provide sanitation and trash management for homeless persons .	Permit Provision B.3.b.(1)(b)	●	○	○	○	○	◐	○	○	●	○	○	●	◐
Develop pilot project to identify and carry out site downspout disconnections in targeted areas.	Permit Provision B.3.b.(1)(b)	◐	◐	◐	◐	○	◐	○	◐	○	●	◐	○	◐

**Table I.12.1  
 Potential Non-Structural Strategies for the San Diego Bay Watershed Management Area (continued)**

NONSTRUCTURAL STRATEGY	Reference	Water Chemistry Benefit								Physical and Biological Benefit				
		Bacteria	Metals	Organics	Sediment	Pesticides	Nutrients	Oil and Grease	Dissolved Solids	Gross Pollutants	Flow Rate	Volume Reduction	Habitat/ Wildlife	Aquatic Life
Continue to participate in source-reduction initiatives.	Permit Provision B.3.b.(1)(b)	<i>Varies by initiative. For example, the Brake Pad Partnership specifically targets copper in brake pads and is therefore a source-reduction initiative for metals.</i>												
Proactively monitor for erosion, and complete minor repair and slope stabilization.*	Permit Provision B.3.b.(1)(b)	●	○	○	●	○	●	○	●	○	○	○	●	●
Increase identification and enforcement of actionable erosion and slope stabilization issues on private property and require stabilization and repair.*	Permit Provision B.3.b.(1)(b)	●	○	○	●	○	●	○	●	○	○	○	●	●
Implement mapping and risk assessment of agricultural operations.	Permit Provision B.3.b.(1)(b)	●	●	●	●	●	●	●	●	●	●	●	●	●
Implement mapping and risk assessment of on-site wastewater treatment (septic) systems.	Permit Provision B.3.b.(1)(b)	●	●	●	●	●	●	●	●	●	●	○	●	●

**Table I.12.1  
 Potential Non-Structural Strategies for the San Diego Bay Watershed Management Area (continued)**

NONSTRUCTURAL STRATEGY	Reference	Water Chemistry Benefit									Physical and Biological Benefit			
		Bacteria	Metals	Organics	Sediment	Pesticides	Nutrients	Oil and Grease	Dissolved Solids	Gross Pollutants	Flow Rate	Volume Reduction	Habitat/ Wildlife	Aquatic Life
Protect areas that are functioning naturally.	Permit Provision B.3.b.(1)(b)	●	●	●	●	●	●	●	●	●	●	●	●	●
Remove invasive plants and animals.*	Permit Provision B.3.b.(1)(b)	●	○	○	●	○	○	○	○	○	●	○	●	●

**Table I.12.1  
 Potential Non-Structural Strategies for the San Diego Bay Watershed Management Area (continued)**

NONSTRUCTURAL STRATEGY	Reference	Water Chemistry Benefit								Physical and Biological Benefit		
		Bacteria	Metals	Organics	Sediment	Pesticides	Nutrients	Oil and Grease	Dissolved Solids	Gross Pollutants	Flow Rate	Volume Reduction
<p>Collaborate with entities potentially including, but not limited to:</p> <ul style="list-style-type: none"> <li>• Departments within the same Responsible Party;</li> <li>• Other governmental agencies such as drinking water , transportation, or public health agencies;</li> <li>• Non-governmental agencies such as environmental and community groups and private corporations; and</li> <li>• Dischargers regulated under other permits, including Phase II NPDES Permit, Industrial General Permit, and Construction General Permit.</li> </ul> <p>Collaboration may take the form of joint participation in a study or development of a study or BMP, forming watershed or sub-watershed groups (including watershed councils), or participating in already formed groups, such as the Integrated Regional Water Management groups.</p>	Permit Provision B.3.b.(1)(b)	<i>Varies by initiative and project.</i>										

**Table I.12.2  
 Potential Distributed Structural BMPs and Pollutant Reduction**

BMP	Water Chemistry Benefit									Physical and Biological Benefits			
	Bacteria	Metals	Organics	Sediment	Pesticides	Nutrients	Oil and Grease	Dissolved Minerals	Gross Pollutants	Flow rate	Volume Reduction	Habitat or Wildlife	Aquatic Life
Bioretention*	●	●	●	●	●	▸	●	▸	●	●	●	○	▸
Infiltration Trenches*	●	●	●	●	●	●	●	●	●	●	●	○	●
Bioswales*	●	●	●	●	●	▸	●	▸	●	●	●	○	▸
Planter Boxes*	●	●	●	●	●	▸	●	▸	●	▸	▸	○	▸
Permeable Pavement*	▸	●	▸	●	●	▸	▸	▸	▸	●	●	○	▸
Constructed Wetlands*	●	●	▸	●	●	●	▸	▸	●	●	▸	●	▸
Sand Filters*	●	●	●	●	●	▸	●	○	●	▸	▸	○	▸
Vegetated Swales*	▸	▸	▸	●	▸	▸	▸	○	●	▸	▸	○	▸
Vegetated Filter Strips*	▸	▸	▸	●	▸	▸	▸	○	●	▸	▸	○	▸
Green Roofs*	▸	▸	○	●	○	○	○	○	○	●	▸	○	▸
Trash Segregation*	▸	▸	○	○	○	○	▸	○	●	○	○	○	▸
Proprietary BMPs*	Vary by BMP type and pollutant target, but are unlikely to target habitat or wildlife.												

Notes:

- Provides primary pollutant reduction.
- Provides secondary pollutant reduction.
- Provides minimal or no pollutant reduction.

\* Indicates potential jurisdictional and watershed strategies that were considered based on public input, including: public workshops, consultation panel meetings and comments, and comments submitted during the public comment periods.

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**Table I.12.3  
 Consideration of Potential Strategies Suggested by the Public**

Potential Strategy:	Source:	Comment Timeframe:	Considered?
“Incentivization and regulation of private actors to adopt and implement distributed and/or centralized BMPs throughout the watershed on private property.”	San Diego Coastkeeper, Letter to Wayne Chiu Re: San Diego Coastkeeper’s comments on Draft WQIP for San Diego Bay; Permit No. R9-2013-0001 (MS4 Permit). July 21, 2014.	July 2014	✓
“Implementation of a Stormwater Utility, the purpose of which is to raise the necessary funding to implement stormwater plans and requirements. In instances where funding is inadequate, include a strategy to raise funding levels and appropriations toward compliance.”	San Diego Coastkeeper, Letter to Wayne Chiu Re: San Diego Coastkeeper’s comments on Draft WQIP for San Diego Bay; Permit No. R9-2013-0001 (MS4 Permit). July 21, 2014.	July 2014	✓
“Public-private partnerships, private-NGO partnerships, and public-NGO partnerships aimed at best management practice (BMP) implementation (structural and nonstructural, source control and technological control) on private and public property.”	San Diego Coastkeeper, Letter to Wayne Chiu Re: San Diego Coastkeeper’s comments on Draft WQIP for San Diego Bay; Permit No. R9-2013-0001 (MS4 Permit). July 21, 2014.	July 2014	✓
“Increased enforcement against polluters and illicit dischargers. Where capacity or funding is an issue, include a strategy to increase funding and capacity to allow for additional enforcement.”	San Diego Coastkeeper, Letter to Wayne Chiu Re: San Diego Coastkeeper’s comments on Draft WQIP for San Diego Bay; Permit No. R9-2013-0001 (MS4 Permit). July 21, 2014.	July 2014	✓
“Strategies <i>must include</i> additional regulation and/or enforcement of MS4 and non-MS4 sources of pollutants in water bodies. Examples to be included are (a) the regulation of sites that may be contributors to pollutants in the MS4 system, (b) regulation of non-MS4 activities that ultimately impact the MS4 or receiving waters, and (c) regulation of noncompatible uses or practices within a jurisdiction to help eliminate MS4 pollutant sources. Such potential strategies regulation or protocols <i>must include</i> : land use regulations/amendments; development moratoriums; zoning amendments; irrigation scheduling, management, and BMPs; pesticide application regulations and prohibitions; regulations requiring and incentivizing distributed BMPs and requiring maintenance of distributed BMPs, coordination with non-municipal sources, and increased overall enforcement.”	San Diego Coastkeeper, Letter to Wayne Chiu Re: San Diego Coastkeeper’s comments on Draft WQIP for San Diego Bay; Permit No. R9-2013-0001 (MS4 Permit). July 21, 2014.	July 2014	✓
“Green infrastructure projects that serve as jurisdictional compliance BMPs, and that may also serve concurrently as Alternative Compliance BMPs. An example might be a constructed wetland or stream rehabilitation, implemented by a Copermittee towards compliance, the scope of which may be broadened in conjunction or partnership with an Alternative Compliance project that absolutely ensures operations and maintenance in perpetuity, perhaps through an endowment or trust.”	San Diego Coastkeeper, Letter to Wayne Chiu Re: San Diego Coastkeeper’s comments on Draft WQIP for San Diego Bay; Permit No. R9-2013-0001 (MS4 Permit). July 21, 2014.	July 2014	✓
“Any and all green infrastructure or “multi-use treatment area” BMPs for which there exists current data on effectiveness. At a minimum these must include: “green streets,” bioretention, infiltration, swales, rain gardens, downspout disconnections, green roofs, rainwater harvesting, porous pavements, wetlands, and land conservation.”	San Diego Coastkeeper, Letter to Wayne Chiu Re: San Diego Coastkeeper’s comments on Draft WQIP for San Diego Bay; Permit No. R9-2013-0001 (MS4 Permit). July 21, 2014.	July 2014	✓
“Partnerships and information sharing with NGOs (including San Diego Coastkeeper) and the Board towards enforcement actions against polluters/illicit dischargers impairing receiving waters.”	San Diego Coastkeeper, Letter to Wayne Chiu Re: San Diego Coastkeeper’s comments on Draft WQIP for San Diego Bay; Permit No. R9-2013-0001 (MS4 Permit). July 21, 2014.	July 2014	✓
“Capture and use of stormwater to augment imported water supplies and to reduce flows in the MS4.”	San Diego Coastkeeper, Letter to Wayne Chiu Re: San Diego Coastkeeper’s comments on Draft WQIP for San Diego Bay;	July 2014	✓

**Table I.12.3**  
**Consideration of Potential Strategies Suggested by the Public (continued)**

Potential Strategy:	Source:	Comment Timeframe:	Considered?
	Permit No. R9-2013-0001 (MS4 Permit). July 21, 2014.		
“Stream, channel, habitat, and wetlands restoration and other projects that restore both physical stream channel conditions and lost ecosystem services, and that have the potential to provide multiple water quality and societal and recreational benefits.”	San Diego Coastkeeper, Letter to Wayne Chiu Re: San Diego Coastkeeper’s comments on Draft WQIP for San Diego Bay; Permit No. R9-2013-0001 (MS4 Permit). July 21, 2014.	July 2014	✓

**Table I.12.3  
 Consideration of Potential Strategies Suggested by the Public (continued)**

Potential Strategy:	Source:	Comment Timeframe:	Considered?
“Implementation of BMPs with multiple benefits in addition to improved water quality, such as those benefiting public health, habitat creation, and additional recreational activities.”	San Diego Coastkeeper, Letter to Wayne Chiu Re: San Diego Coastkeeper’s comments on Draft WQIP for San Diego Bay; Permit No. R9-2013-0001 (MS4 Permit). July 21, 2014.	July 2014	✓
“Strengthening of Jurisdictional Runoff Management Programs and implementation.”	San Diego Coastkeeper, Letter to Wayne Chiu Re: San Diego Coastkeeper’s comments on Draft WQIP for San Diego Bay; Permit No. R9-2013-0001 (MS4 Permit). July 21, 2014.	July 2014	✓
“Strategies that address multiple PWQCs to a significant degree, especially in the case where multiple HPWQCs may be listed in the same geographical area, subwatershed, or watershed.”	San Diego Coastkeeper, Letter to Wayne Chiu Re: San Diego Coastkeeper’s comments on Draft WQIP for San Diego Bay; Permit No. R9-2013-0001 (MS4 Permit). July 21, 2014.	July 2014	✓
“...a Storm Water Mitigation Plan (Mitigation Plan) for the SCNP site, or a change in strategy of collecting more data as part of the WQIP Plan that is better suited to identifying priorities should be prepared using the information SCA provides in this letter, so evidence is available to assess with MS4 methodology the erosion and subsequent marine pollution occurring in SCNP from parkland runoff and Point Loma Nazarene University campus (PLNU) run-on that causes the majority of erosional impacts in the SCNP.”	Sunset Cliffs Association, Letter to Wayne Chiu Re: Request for including the Sunset Cliffs Natural Park in the draft San Diego Bay Watershed Management Area Water Quality Improvement Plan July 28, 2014	July 2014	✓
Chollas Creek - Reduction of flow into Chollas Creek would be an appropriate strategy/goal.	Public Comments from Workshop	September 2014	✓
Chollas Creek - Natural structural Best Management Practices (BMPs) such as the canyon BMPs from the Chollas Watershed Comprehensive Load Reduction Plan (CLRP) should be emphasized over man-made structural BMPs because they have so many other co-benefits.	Public Comments from Workshop	September 2014	✓
Chollas Creek - A certain area or number of linear feet of restored wetlands could be used as an interim goal.	Public Comments from Workshop	September 2014	✓
Chollas Creek - Measureable progress toward the final goal can be made with non-structural methods, such as green infrastructure, specifically, wetlands, riparian rehabilitation and restoration. The metric would be the reduction in flow into the creek.	Public Comments from Workshop	September 2014	✓
Chollas Creek - Stormwater pipe cleaning should be used as a strategy, not just catchment basin cleaning. Look to sanitary sewer departments for examples of how to do this.	Public Comments from Workshop	September 2014	✓
Chollas Creek - Cut down on paperwork, to make work move faster and allow organizations to work quickly and efficiently.	Public Comments from Workshop	September 2014	✓
Chollas Creek - Include a specific discussion in the plan to stabilize or eliminate toxics in soils so they don’t get into Chollas Creek. The interim goal would be an activity that leads to that outcome.	Public Comments from Workshop	September 2014	✓
Airport - Even with landscaping opportunities, cisterns could be used more at the airport.	Public Comments from Workshop	September 2014	✓
Airport - General support for source controls on the metals as a potential strategy rather than relying on removal and treatment at the airport.	Public Comments from Workshop	September 2014	✓
Physical Aesthetics - Incorporate more low-flow diversions; they have a lot of collateral benefits.	Public Comments from Workshop	September 2014	✓
Physical Aesthetics – BMP maintenance should be addressed in the plan	Public Comments from Workshop	September 2014	✓

**Table I.12.3**  
**Consideration of Potential Strategies Suggested by the Public (continued)**

Potential Strategy:	Source:	Comment Timeframe:	Considered?
Physical Aesthetics - Strategies should include inline inserts and filters to capture trash before it reaches the creeks and ocean.	Public Comments from Workshop	September 2014	✓
Physical Aesthetics – Increased enforcement of illicit trash dumping should be a strategy.	Public Comments from Workshop	September 2014	✓
Physical Aesthetics – Use trash surveys to direct cleanup efforts.	Public Comments from Workshop	September 2014	✓

**Table I.12.3  
 Consideration of Potential Strategies Suggested by the Public (continued)**

Potential Strategy:	Source:	Comment Timeframe:	Considered?
<b>Swimmable Waters</b> - It doesn't make sense for kelp patrols to be included in the list of target strategies because kelp is beneficial to the natural environment.	Public Comments from Workshop	September 2014	✓
<b>Swimmable Waters</b> - Given how much of the areas near swimming opportunities are owned by non MS4 jurisdictions, collaboration with neighboring agencies should be on the list of strategies.	Public Comments from Workshop	September 2014	✓
Riparian Area - Offer incentive programs to business owners and homeowners to get a percent reduction in one of their utility bills in exchange for changing their landscaping so that water runs into a basin or contour rather than directly into the street. This will encourage infiltration	Public Comments from Workshop	September 2014	✓
Riparian Area - Eliminate channelization near National City City Hall, and reduce the surrounding lawn size.	Public Comments from Workshop	September 2014	✓
Riparian Area - U.S. Army Corps of Engineers Remediation General Permit 41 can be used to do restoration and reduce streambed alteration costs.	Public Comments from Workshop	September 2014	✓
Riparian Area - Treatment downstream as alternative compliance also helps treat existing development.	Public Comments from Workshop	September 2014	✓
Riparian Area - Find a way to connect HPWQC strategies to high value alternative compliance project.	Public Comments from Workshop	September 2014	✓
Riparian Area - Riparian restorations should focus on length and contiguity.	Public Comments from Workshop	September 2014	✓
Strategies with relatively high impact and low resource requirements are scheduled earlier	Consultation Panel Comments on Second Interim Deliverable	October 2014	✓
Public education should involve more than just water quality issues. It should be more in depth and involve basic environmental education practices. Street sweeping does not solve trash problems in areas where dumping is persistent in Otay Valley Regional Park, so I'd like to echo Travis's comment on installing public trash receptacles and even moving forward perhaps seeing this as a jurisdictional program.	Consultation Panel Comments on Second Interim Deliverable	October 2014	✓
Education should be focused not only on water quality improvement should be focused not only on water quality, but also on watershed science, basic BMP for watersheds, and trash control and mitigation. There should be a strong emphasis on public education and increasing access/awareness to public recreation areas in the SD Bay Watershed.	Consultation Panel Comments on Second Interim Deliverable	October 2014	✓
Public education addresses nearly all of the common water quality concerns, and street sweeping addresses sediment, trash, and a number of pollutants associated with roadway runoff. Does public education solve water quality concerns, or just address them?  Studies show a mixed water quality response to street sweeping. Is street sweeping effective enough to be listed as one of the two core jurisdictional programs?	Consultation Panel Comments on Second Interim Deliverable	October 2014	✓
Public education, targeting both the general public and specific categories of emitters of contaminants (individuals, businesses, public agencies) can play a large and important role in meeting the goals of the permit. It would be useful to expand on this here, as well as in the tables of goals and strategies. Prevention is generally more effective and less costly than remediation.	Consultation Panel Comments on Second Interim Deliverable	October 2014	✓
Since the offsite alternative compliance option is seen as a means of achieving compliance, which might not be feasible otherwise, or of achieving it in a more effective and/or cost-effective manner, this	Consultation Panel Comments on Second Interim Deliverable	October 2014	✓

**Table I.12.3  
 Consideration of Potential Strategies Suggested by the Public (continued)**

Potential Strategy:	Source:	Comment Timeframe:	Considered?
Section should include direct encouragement to Copermittees to consider and implement such options. There should be specific emphasis on identifying projects that provide multi-jurisdictional benefits. Also, the list of candidate projects in Appendix C should remain open to augmentation as either Copermittees or private applicants identify additional opportunities. Because many of the candidate projects presumably will be large and costly, there should be some discussion here of how Copermittees and/or private applicants may assume responsibility for proportional parts of such projects, similar to how local jurisdictions collect and aggregate impact fees from private developments.			
Source reduction initiatives are strong. We feel these initiatives will have significant water quality effects.	Consultation Panel Comments on Second Interim Deliverable	October 2014	✓
Program addresses identifying trash pollutant hot spots and focuses on inspection and education. Would like to see installing public trash receptacles where appropriate.	Consultation Panel Comments on Second Interim Deliverable	October 2014	✓
Again, no mention of installing new public trash receptacles in hot spots for trash generation. Chula Vista plans to remove trash and other pollutants from roadways and MS4 infrastructure, but jurisdictions need to also focus on pollution prevention.	Consultation Panel Comments on Second Interim Deliverable	October 2014	✓
No comments received.	Public Comment Period for Second Interim Deliverable: goals, Strategies, & Schedules	January 2015	N/A
“Creation of incentives and regulations for private to adopt and implement distributed and/or centralized BMPs throughout the watershed on private property.”	San Diego Coastkeeper, Letter to San Diego Regional Water Quality Control Board Re: San Diego Coastkeeper’s comments on the SD County MS4 WQIPs. July 28, 2015.	July 2015	✓
“Implementation of a Stormwater Utility, the purpose of which is to raise the necessary funding to implement stormwater plans and requirements. In instances where funding is inadequate, include a strategy to raise funding levels and appropriations toward compliance.”	San Diego Coastkeeper, Letter to San Diego Regional Water Quality Control Board Re: San Diego Coastkeeper’s comments on the SD County MS4 WQIPs. July 28, 2015.	July 2015	✓
“Increased enforcement against polluters and illicit dischargers. Where capacity or funding is an issue, include a strategy to increase funding and capacity to allow for additional enforcement.”	San Diego Coastkeeper, Letter to San Diego Regional Water Quality Control Board Re: San Diego Coastkeeper’s comments on the SD County MS4 WQIPs. July 28, 2015.	July 2015	✓
“Strategies <i>must include</i> additional regulation and/or enforcement of MS4 and non-MS4 sources of pollutants in water bodies. Examples to be included are (a) the regulation of sites that may be contributors to pollutants in the MS4 system, (b) regulation of non-MS4 activities that ultimately impact the MS4 or receiving waters, and (c) regulation of non-compatible uses or practices within a jurisdiction to help eliminate MS4 pollutant sources. Such potential strategies regulation or protocols <i>must include</i> : land use regulations/amendments; development moratoriums; zoning amendments; irrigation scheduling, management, and BMPs; pesticide application regulations and prohibitions; regulations requiring and incentivizing distributed BMPs and requiring maintenance of distributed BMPs, and increased overall enforcement.”	San Diego Coastkeeper, Letter to San Diego Regional Water Quality Control Board Re: San Diego Coastkeeper’s comments on the SD County MS4 WQIPs. July 28, 2015.	July 2015	✓
“Green infrastructure projects that serve as jurisdictional compliance BMPs, and that may also serve concurrently as Alternative Compliance BMPs. An example might be a constructed wetland or stream rehabilitation, implemented by a	San Diego Coastkeeper, Letter to San Diego Regional Water Quality Control Board Re: San Diego Coastkeeper’s comments	July 2015	✓

**Table I.12.3  
 Consideration of Potential Strategies Suggested by the Public (continued)**

Potential Strategy:	Source:	Comment Timeframe:	Considered?
Copermittee towards compliance, the scope of which may be broadened in conjunction or partnership with an Alternative Compliance project that absolutely ensures operations and maintenance in perpetuity, perhaps through an endowment or trust."	on the SD County MS4 WQIPs. July 28, 2015.		
"Any and all green infrastructure or "multi-use treatment area" BMPs for which there exists current data on effectiveness. At a minimum these must include: "green streets", bioretention, infiltration, swales, rain gardens, downspout disconnections, green roofs, rainwater harvesting, porous pavements, wetlands, and land conservation."	San Diego Coastkeeper, Letter to San Diego Regional Water Quality Control Board Re: San Diego Coastkeeper's comments on the SD County MS4 WQIPs. July 28, 2015.	July 2015	✓
"Partnerships and information sharing with NGOs (including San Diego Coastkeeper) and the Board towards enforcement actions against polluters/illicit dischargers impairing receiving waters."	San Diego Coastkeeper, Letter to San Diego Regional Water Quality Control Board Re: San Diego Coastkeeper's comments on the SD County MS4 WQIPs. July 28, 2015.	July 2015	✓
"Capture and use of stormwater to augment imported water supplies and to reduce flows in the MS4."	San Diego Coastkeeper, Letter to San Diego Regional Water Quality Control Board Re: San Diego Coastkeeper's comments on the SD County MS4 WQIPs. July 28, 2015.	July 2015	✓
"Stream, channel, habitat, and wetlands restoration and other projects that restore both physical stream channel conditions and lost ecosystem services, and that have the potential to provide multiple water quality and societal and recreational benefits."	San Diego Coastkeeper, Letter to San Diego Regional Water Quality Control Board Re: San Diego Coastkeeper's comments on the SD County MS4 WQIPs. July 28, 2015.	July 2015	✓
"Implementation of BMPs with multiple benefits in addition to improved water quality, such as those benefiting public health, habitat creation, waters supply augmentation, and additional recreational activities."	San Diego Coastkeeper, Letter to San Diego Regional Water Quality Control Board Re: San Diego Coastkeeper's comments on the SD County MS4 WQIPs. July 28, 2015.	July 2015	✓
"Strengthening of Jurisdictional Runoff Management Programs and implementation."	San Diego Coastkeeper, Letter to San Diego Regional Water Quality Control Board Re: San Diego Coastkeeper's comments on the SD County MS4 WQIPs. July 28, 2015.	July 2015	✓
"Strategies that address multiple PWQCs to a significant degree"	San Diego Coastkeeper, Letter to San Diego Regional Water Quality Control Board Re: San Diego Coastkeeper's comments on the SD County MS4 WQIPs. July 28, 2015.	July 2015	✓
"Strategies to maintain open space and natural functions"	San Diego Coastkeeper, Letter to San Diego Regional Water Quality Control Board Re: San Diego Coastkeeper's comments on the SD County MS4 WQIPs. July 28, 2015.	July 2015	✓
"Conspicuously absent is a fact sheet for a drywell, which was previously included in the City of San Diego Storm Water Standards Manual, dated January 20, 2012, as well as in the County of San Diego SUSMP revised edition, dated August 1, 2012. Table 1 below identifies the page, paragraph, and context of each mention of drywell or dry well within these 2 documents."  "Given that drywells are also used in dozens of other California cities and counties, we strongly recommend the inclusion of an additional BMP Design Fact Sheet for non-proprietary drywells, perhaps INF-4. In many areas across San Diego, the surface soils are very consolidated and often impermeable, which makes surface infiltration	Torrent Resources, San Diego WQIP Letter. July 29, 2015.	July 2015	✓

**Table I.12.3  
 Consideration of Potential Strategies Suggested by the Public (continued)**

Potential Strategy:	Source:	Comment Timeframe:	Considered?
<p>infeasible. However, it is our experience that in San Diego and surrounding areas the underlying soils are, in fact, highly permeable. The benefits of including drywells in the Model BMP Design Manual include higher performance from on-site retention facilities, reduction in downstream flooding and erosion, and increased recharge of underlying groundwater aquifers.”</p>			
<p>“Include city workers in education programs (We've seen piles of clippings left in gutter after city crew mowed park)”</p>	<p>Surfrider Foundation, Letter Re: San Diego Surfrider’s Comments on the SD County MS4 WQIPs. July 30, 2015.</p>	<p>July 2015</p>	<p>✓</p>
<p>“Several Copermittees did not include any proposed optional jurisdictional strategies to be implemented within their jurisdictions, as necessary, to effectively prohibit non- storm water discharges to the MS4, reduce pollutants in storm water discharges from the MS4 to the maximum extent practicable (MEP), protect beneficial uses of receiving waters from MS4 discharges, or achieve proposed interim and final numeric goals.”</p>	<p>San Diego Regional Water Quality Control Board, Subject: General Comments on Final Water Quality Improvement Plans and Notice of Noncompliance. August 5, 2015.</p>	<p>August 2015</p>	<p>✓</p>
<p>“Most Copermittees did not include an incentive or program to encourage or implement projects to retrofit areas of existing development within its jurisdiction. Pursuant to Provision E.5.e.(1)(a), every Copermittee is required to identify areas of existing development within its jurisdiction as candidates for retrofitting. Therefore, every Copermittee should have some incentive or program to encourage implementation of retrofit projects in the areas of existing development identified in its JRMP document pursuant to Provision E.5.e.(1)(a), unless there is an acceptable rationale in the Plan describing why it is infeasible to encourage or implement such retrofit projects.”</p>	<p>San Diego Regional Water Quality Control Board, Subject: General Comments on Final Water Quality Improvement Plans and Notice of Noncompliance. August 5, 2015.</p>	<p>August 2015</p>	<p>✓</p>
<p>“Most Copermittees did not include an incentive or program to encourage or implement projects that will rehabilitate the conditions of channels or habitats within its jurisdiction. Pursuant to Provision E.5.e.(2)(a), every Copermittee is required to identify streams, channels, and/or habitats in areas of existing development within its jurisdiction as candidates for rehabilitation. Therefore, every Copermittee should have some incentive or program to encourage implementation of projects to rehabilitate the conditions of channels or habitats within its jurisdiction identified in JRMP document pursuant to Provision E.5.e.(2)(a), unless there is an acceptable rationale in the Plan describing why it is infeasible to encourage or implement such rehabilitation projects.”</p>	<p>San Diego Regional Water Quality Control Board, Subject: General Comments on Final Water Quality Improvement Plans and Notice of Noncompliance. August 5, 2015.</p>	<p>August 2015</p>	<p>✓</p>
<p>“Many proposed optional jurisdictional strategies did not appear to be a BMP, an incentive, or a program that could be implemented to effectively prohibit nonstorm water discharges to the MS4, reduce pollutants in storm water discharges from the MS4 to the MEP, protect beneficial uses of receiving waters from MS4 discharges, or achieve proposed interim and final numeric goals. Implementation of an optional jurisdictional strategy is expected to result in an improvement of water quality.”</p>	<p>San Diego Regional Water Quality Control Board, Subject: General Comments on Final Water Quality Improvement Plans and Notice of Noncompliance. August 5, 2015.</p>	<p>August 2015</p>	<p>✓</p>
<p>“Unless acceptable data or rationale are provided in the Plan, a Copermittee that did not propose any incentives or programs to encourage or implement projects to retrofit areas of existing development within its jurisdiction as optional jurisdictional strategies is not in compliance with the requirements of Provision B.3.b.(1)(b)(ii). A Copermittee that has not identified areas of existing development within its jurisdiction as candidates for retrofitting in its JRMP document also is not in</p>	<p>San Diego Regional Water Quality Control Board, Subject: General Comments on Final Water Quality Improvement Plans and Notice of Noncompliance. August 5, 2015.</p>	<p>August 2015</p>	<p>✓</p>

**Table I.12.3**  
**Consideration of Potential Strategies Suggested by the Public (continued)**

Potential Strategy:	Source:	Comment Timeframe:	Considered?
compliance with Provision E.5.e.(1)(a), unless acceptable data or rationale is provided."			
"Unless acceptable data or rationale are provided in the Plan, a Copermittee that did not propose any incentives or programs to encourage or implement projects to rehabilitate channels or habitats within its jurisdiction as optional jurisdictional strategies is not in compliance with the requirements of Provision B.3.b.(1)(b)(iii). A Copermittee that has not identified projects to rehabilitate the conditions of channels or habitats within its jurisdiction in its JRMP document also is not in compliance with Provision E.5.e.(2)(a), unless acceptable data or rationale are provided."	San Diego Regional Water Quality Control Board, Subject: General Comments on Final Water Quality Improvement Plans and Notice of Noncompliance. August 5, 2015.	August 2015	✓
"A Plan that did not propose any Watershed Management Area strategies to be implemented on a regional or multi-jurisdictional scale, as necessary, to effectively prohibit non-storm water discharges to the MS4, reduce pollutants in storm water discharges from the MS4 to the MEP, protect beneficial uses of receiving waters from MS4 discharges, or achieve proposed interim and final numeric goals is not in compliance with the requirements of Provision B.3.b.(2)(a)."	San Diego Regional Water Quality Control Board, Subject: General Comments on Final Water Quality Improvement Plans and Notice of Noncompliance. August 5, 2015.	August 2015	✓
"Unless acceptable data or rationale are provided in the Plan, a Plan that did not propose any incentives or programs to encourage or implement projects to retrofit areas of existing development as a Watershed Management Area strategy is not in compliance with the requirements of Provision B.3.b.(2)(b)."	San Diego Regional Water Quality Control Board, Subject: General Comments on Final Water Quality Improvement Plans and Notice of Noncompliance. August 5, 2015.	August 2015	✓
"Unless acceptable data or rationale are provided in the Plan, a Plan that did not propose any incentives or programs to encourage or implement projects to rehabilitate channels, streams, or habitats as a Watershed Management Area strategy is not in compliance with the requirements of Provision B.3.b.(2)(c)."	San Diego Regional Water Quality Control Board, Subject: General Comments on Final Water Quality Improvement Plans and Notice of Noncompliance. August 5, 2015.	August 2015	✓

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