Table 1. City of San Diego Jurisdictional Strategies

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
Jurisdictional Strategies **JRMP (E.2-E.7) Strategies (E.3.b.(1)(a))**															
E.3 Development Planning															
All Development Projects															
CSD-JRMP-01	JRMP Baseline	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. May include providing technical support and consultation for other City departments that review project submittals for compliance with Storm Water Standards Manual requirements. May also include review of City projects for compliance with Storm Water Standards Manual requirements.	City-wide	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Land Development	T&SW with DSD, PWD
CSD-JRMP-02	JRMP Baseline	Develop Design Standards for Public LID BMPs.	Improve quality of design to ensure efficiency and reliability in public designs.	City-wide	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
CSD-JRMP-03	JRMP Baseline	Outreach to impacted commercial, industrial, municipal, and residential development regarding minimum BMP requirement updates.	May include onsite education at the time of inspections, city staff training, and mailers to business owners and prospective business owners.	City-wide	FY15	Continuous- As needed	X	X	X	X	X	X	X	Commercial, Industrial, and Residential Development Areas	TBD

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CSD-JRMP-04*	JRMP Enhancement	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.	City-wide	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-JRMP-05*	JRMP Enhancement	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.	City-wide	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-JRMP-06	JRMP Baseline	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.	City-wide	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Land Development	T&SW with DSD, BIA, NGOs, Copermittees, and Engineering Community

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Priority Development Projects (PDPs)															
CSD-JRMP-07	JRMP Baseline	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.	City-wide	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-JRMP-08	JRMP Baseline	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. Inspect additional BMPs as needed. 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.	City-wide	FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Land Development	T&SW with DSD, PWD, BIA, NGOs, Copermittees, and Engineering Community

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CSD-JRMP-09	JRMP Baseline	Update Storm Water Standards Manual 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. Storm Water Standards Manual will be updated in accordance with the Permit and made available on the City's website.	City-wide	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-JRMP-10*	JRMP Enhancement	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.	City-wide	FY15	Completed within schedule	X		X	X			X	Waste Disposal	T&SW with DSD, PWD, BIA, NGOs, Copermittees, and Engineering Community
CSD-JRMP-11*	JRMP Enhancement	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.	City-wide	FY15	Completed within schedule	X	X		X	X	X		Animal Facilities	T&SW with DSD, PWD, BIA, NGOs, Copermittees, and Engineering Community
CSD-JRMP-12*	JRMP Enhancement	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.	City-wide	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

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CSD-JRMP-13*	JRMP Enhancement	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.	City-wide	FY15	Completed within schedule	X		X	X	X	X		Automotive	T&SW with DSD, PWD, BIA, NGOs, Copermittees, and Engineering Community
CSD-JRMP-14*	JRMP Enhancement	Offsite Alternative Compliance Option	Refer to JRMP Section 4.2.3.1. WMAA and Water Quality Equivalency Study completed in FY15. Phase I, applicant implemented projects, is anticipated to be in effect by the end of FY16 contingent on Regional Board's approval of the WQIPs. Phase II, the expansion of the program to include other alternative compliance options, is expected to begin in FY16.	City-wide	FY15	Continuous-Ongoing	X	X	X	X	X	X	X	Land Development	T&SW with DSD, PWD, BIA, NGOs, Copermittees, and Engineering Community
E.4 Construction Management															
CSD-JRMP-15	JRMP Baseline	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.	City-wide	FY16	Continuous-Ongoing			X	X	X	X		Construction Areas	T&SW with DSD, PWD

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CSD-JRMP-16	JRMP Baseline	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. Any construction site in an area draining to the La Jolla ASBS will be inspected weekly 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.	City-wide (Mission Bay - Scripps ASBS specific)	FY16	Continuous-Ongoing			X	X	X	X		Construction Areas	T&SW with DSD, PWD
E.5 Existing Development															
Commercial, Industrial, Municipal, and Residential Facilities and Areas															
CSD-JRMP-17	JRMP Baseline	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 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 five years, 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.	City-wide	FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Commercial, Industrial, Municipal, and Residential Areas	T&SW with DSD, PUD, & PWD

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CSD-JRMP-18	JRMP Baseline	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.	City-wide	FY15	Continuous every 5 years/ permit cycle	X	X	X	X	X			Residential, Commercial, and Industrial Areas	T&SW
CSD-JRMP-19	JRMP Baseline	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.	City-wide Residential, commercial and industrial areas	FY15	Continuous-Ongoing	X	X	X	X	X			Residential, Commercial, and Industrial Areas	T&SW
CSD-JRMP-20	JRMP Baseline	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.	City-wide	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Commercial, Industrial, Municipal, and Residential Areas	T&SW
CSD-JRMP-21	JRMP Baseline	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.	City-wide	FY15	Continuous- As needed						X		Residential and Municipal Areas	T&SW,City Attorney (Civil & Criminal)
CSD-JRMP-22*	JRMP Enhancement	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, and aggressive subsidies or rebates for grass replacement and rainwater harvesting. Existing programs will be expanded overall, and will occur city-wide in residential, commercial, and industrial areas.	City-wide Residential and Commercial Areas	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

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MS4 Infrastructure															
CSD-JRMP-23	Flood Risk Management	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.	City-wide	FY16	Continuous-Ongoing	X		X	X	X			Outfalls, Flood Control Structures	T&SW
CSD-JRMP-24*	JRMP Enhancement	Enhanced catch basin cleaning to increase pollutant removal ~~including(up to 4 times per year)~~ in the rainy season.	Based on catch basin record keeping the City will target inspections and catch basin cleaning (based on inspection) where basin conditions have shown that an individual structure requires cleaning. The City will inspect all inlets and clean-outs in the Chollas and Los Peñasquitos watersheds in the dry or rainy season each year. Maintenance and scheduled cleanings are based on structure condition observed during the inspection. If a structure is determined to be in "Fair" condition it will be scheduled for a hand cleaning. If the structure is determined to be in "Bad" condition the structure will be scheduled to be cleaned with a vactor truck. Basins that require regular cleanings are included on watchlist to target further maintenance and/or inspections. Implementation may be adapted based on catch basin record keeping and cleaning optimization. ~~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.~~	Los Peñasquitos WMA and Chollas Watershed	FY16	Continuous-Ongoing	X		X	X	X			Outfalls, Flood Control Structures	T&SW

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CSD-JRMP-24a*	JRMP Enhancement	Target catch basin and inlet inspections and cleanings (based on inspection) in area near mouth of Chollas creek that was subject of Water Board Investigative Order No. R9-2015-0058	A two-phase sediment investigation in the Mouth of Chollas Creek was conducted under Investigative Order No. R9-2015-0058. Phase 2 of the Study was conducted in 2018 to identify potential contaminant sources and pollutant transport pathways. The Phase 2 Study also included analyzing sediment collected from storm drains and catch basins. Approximately 20 inlets, 2 catch basins, 6 drainage structures in the vicinity of 28th and 32nd street west of Interstate 5 owned by the City of San Diego were included in the Phase 2 Study for the Investigative Order. The City will inspect these structures in both the dry and rainy season and complete cleanings as necessary.	Chollas Watershed: targeted structures, as described in implementation approach	Ongoing	Continuous-Ongoing	X		X	X	X			Outfalls, Flood Control Structures	T&SW
CSD-JRMP-25*	JRMP Enhancement	Enhanced catch basin cleaning to increase pollutant removal including ~~(between 2-4 times per year in medium priority areas~~ in the rainy season~~)~~.	Based on catch basin record keeping the City will target inspections and catch basin cleaning (based on inspection) where basin conditions have shown that an individual structure requires cleaning. The City will inspect all inlets and clean-outs within the watershed in the dry or rainy season each year. Maintenance and scheduled cleanings are based on structure condition observed during the inspection. If a structure is determined to be in "Fair" condition it will be scheduled for a hand cleaning. If the structure is determined to be in "Bad" condition the structure will be scheduled to be cleaned with a vactor truck. Basins that require regular cleanings are included on watchlist to target further maintenance and/or inspections. Implementation may be adapted based on catch basin record keeping and cleaning optimization. ~~To increase pollutant load removal, catch basins will be cleaned between 2-4 times per year in medium priority areas 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.~~	Tijuana River WMA	FY16	Continuous-Ongoing	X		X	X	X			Outfalls, Flood Control Structures	T&SW

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CSD-JRMP-27	JRMP Baseline	Implement additional BMPs in coordination with Master Maintenance Plan Enhancements	For each channel segment, City will either 1) implement landscape retrofits on one residential property, 2) increase street sweeping frequency by prioritizing high traffic commercial routes adjacent to maintained channel, 3) construct and maintain a stormwater management BMP (e.g. biofiltration system, permeable pavement, vegetated swale, restored wetlands), or 4) increase frequency of catch basin inspection and as-needed cleaning for one year after maintenance.	Los Peñasquitos and Tijuana River WMAs, Chollas Watershed	FY13	Completed within schedule in 5 years (ends FY18)	X	X	X	X	X	X		Outfalls, Flood Control Structures, Streets, Roads	T&SW
CSD-JRMP-28	JRMP Baseline	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.	City-wide	FY16	Continuous-Ongoing	X	X	X		X			Outfalls, Flood Control Structures	T&SW
CSD-JRMP-29	Flood Risk Management	Replacement of hard assets.	Includes needed replacement of storm drains and structures.	City-wide	FY16	Continuous-Ongoing	X	X	X		X			Outfalls, Flood Control Structures	T&SW
CSD-JRMP-30	JRMP Baseline	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.	City-wide	FY16	Continuous-Ongoing	X	X			X			Sewer Infrastructure	T&SW with PUD
CSD-JRMP-31*	JRMP Enhancement	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.	City-wide	FY16	Continuous- As needed	X	X			X			Sewer Infrastructure	T&SW with PUD
Roads, Streets, and Parking Lots															
CSD-JRMP-32	JRMP Baseline	Implement operation and maintenance activities for public streets, unpaved roads, paved roads, and paved highways.	Refer to JRMP Section 7.	City-wide	FY16	Continuous-Ongoing	X	X	X	X	X			Streets, Roads, and Highways	T&SW

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CSD-JRMP-33	JRMP Baseline	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.	Los Peñasquitos WMA and Chollas Watershed	FY16	Continuous- As needed	X	X	X	X	X			Streets, Roads, and Parking	T&SW
CSD-JRMP-34*	JRMP Enhancement	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).	Los Peñasquitos WMA and Chollas Watershed	FY17	Continuous-Ongoing	X	X	X	X	X			Streets, Roads, and Parking	T&SW
CSD-JRMP-35*	JRMP Enhancement	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.	City-wide except San Diego River WMA	FY17	Continuous-Ongoing	X	X	X	X	X			Streets, Roads	T&SW
Pesticides, Herbicides, and Fertilizer BMP Program															
CSD-JRMP-37	JRMP Baseline	Require implementation of BMPs to address application, storage, and disposal of pesticides, herbicides, and fertilizers on commercial, industrial, and municipal properties. Includes education.	Refer to JRMP Sections 7, 8, and 9.	City-wide	FY16	Continuous-Ongoing		X					X	Commercial, Industrial, and Municipal Areas; Landscaping Areas	T&SW with Parks and Rec

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Retrofit and Rehabilitation in Areas of Existing Development															
CSD-JRMP-38	JRMP Baseline	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.	City-wide	FY18	Continuous-Ongoing	X	X	X	X	X	X	X	Land Development	T&SW with DSD, PWD, BIA, NGOs, Copermittees, and Engineering Community
CSD-JRMP-39	JRMP Baseline	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 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.	City-wide	FY18	Continuous-Ongoing	X	X	X	X	X	X	X	Land Development	T&SW with DSD, PWD, BIA, NGOs, Copermittees, and Engineering Community

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E.2 Illicit Discharge, Detection, and Elimination (IDDE) Program															
CSD-JRMP-40	JRMP Baseline	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. 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.	City-wide	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Irrigation Runoff, SSOs, Commercial, Industrial, Municipal, and Residential Areas	T&SW
CSD-JRMP-41	JRMP Baseline	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. 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. For ASBS, during the rainy season, the minimum inspection frequency shall be weekly for construction sites, monthly for industrial facilities, and twice during the rainy season for commercial facilities. For the ASBS area, storm water outfall drains equal to or greater than 18 inches in diameter or width shall be inspected once prior to the beginning of the rainy season and once during the rainy season. Please see Attachment 1 for details on how the IDDE Program will address sources causing or contributing to the HPWQC.	City-wide (Mission Bay - Scripps ASBS specific)	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Irrigation Runoff, SSOs, Commercial, Industrial, Municipal, and Residential Areas	T&SW

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
E.7 Public Education and Participation (B.3.b(1)(a)(iii))															
CSD-JRMP-42	JRMP Baseline	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.	City-wide	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Variable	T&SW
CSD-JRMP-43	JRMP Baseline	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.	City-wide	Prior to FY16	Continuous-Ongoing	X	X						Residential Areas	T&SW with Parks and Rec
CSD-JRMP-44	JRMP Baseline	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.	City-wide Non-residential Areas	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)
CSD-JRMP-45*	JRMP Enhancement	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.	City-wide	FY16	Continuous-Ongoing	X	X	X	X	X	X		Residential Areas, Irrigation Runoff	T&SW
CSD-JRMP-46*	JRMP Enhancement	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.	City-wide	FY16	Continuous-Ongoing	X	X	X	X	X	X		Residential Areas, Irrigation Runoff	T&SW

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-JRMP-47	JRMP Baseline	Develop a targeted education and outreach program for homeowners with orchards or other agricultural land uses on their property.	Educate residents on practices of small-scale or on-site composting to protect local water quality. May include targeted education of owners of chickens to address bacteria. Outreach can be coordinated through the San Diego County Agriculture, Weights, and Measures division.	Los Peñasquitos and San Dieguito River WMAs	FY16	Continuous-Ongoing	X	X		X	X	X		Rural Residential, Agriculture	T&SW with County of San Diego Ag, Weights, and Measures
CSD-JRMP-48	JRMP Baseline	Enhance school and recreation-based education and outreach.	Develop curriculum and establish distribution in public schools. Includes education on water conservation.	City-wide	FY15	Continuous-Ongoing	X	X	X	X	X	X	X	Irrigation Runoff	T&SW, PUD with community-based organization
CSD-JRMP-49	JRMP Baseline	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.	City-wide	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Irrigation Runoff	T&SW with PUD
CSD-JRMP-50*	JRMP Enhancement	Develop and distribute regional training materials 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.	City-wide	FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Commercial Areas, Mobile Businesses	T&SW
CSD-JRMP-51*	JRMP Enhancement	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.	City-wide	FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Variable	T&SW
CSD-JRMP-52	JRMP Baseline	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.	City-wide	Prior to FY16	Continuous-Ongoing		X					X	Residential, Commercial, and Industrial Areas	T&SW

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-JRMP-53*	JRMP Enhancement	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.	City-wide	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Variable	T&SW
E.6 Enforcement Response Plan															
CSD-JRMP-54	JRMP Baseline	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.	City-wide	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
CSD-JRMP-55*	JRMP Enhancement	Focused enforcement of irrigation runoff.	Focused 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.	City-wide	FY16	Continuous-Ongoing	X	X	X	X	X	X		Irrigation Runoff	T&SW
CSD-JRMP-56*	JRMP Enhancement	Focused 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.	City-wide	FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Commercial Areas, Mobile Businesses	T&SW

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-JRMP-57*	JRMP Enhancement	Focused enforcement of all minimum BMPs for existing residential, commercial, and industrial development.	Focused enforcement of existing development minimum BMPs.	City-wide	FY16	Continuous- As needed	X	X	X	X	X	X	X	Residential, Commercial, and Industrial Areas	T&SW
CSD-JRMP-58*	JRMP Enhancement	Focused 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.	City-wide	FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Commercial, Industrial, Municipal, and Residential Areas; Irrigation Runoff	T&SW
CSD-JRMP-59*	JRMP Enhancement	Focused enforcement of sweeping and maintenance of private roads and parking lots in targeted areas.	Refer to Minimum BMPs in JRMP (Appendix IX).	City-wide	FY16	Continuous-Ongoing	X	X	X	X	X			Streets, Roads	T&SW
CSD-JRMP-60*	JRMP Enhancement	Focused 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.	City-wide	FY16	Continuous-Ongoing	X	X			X		X	Hydromodification, Erosion	T&SW
Non-JRMP Strategies (Optional Strategies, B.3.b(1)(b))															
Nonstructural Strategies															
CSD-NS-01	Optional Needed	Conduct a special study on outfall repair/relocation.	Implement fourth phase of a special study which will identify priority locations for outfall repair/relocation and sediment load reductions. Funding and resources have been secured for FY2016.	Los Peñasquitos WMA	FY16	One time	X	X	X		X			Hydromodification, Erosion	T&SW
CSD-NS-02	Optional Needed	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.	City-wide	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

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-NS-03	Optional Needed	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.	City-wide	FY16	Continuous- As needed	X	X	X	X	X	X	X	Residential and Commercial Areas, Streets, and Roads	T&SW with DSD and PWD
CSD-NS-04	Optional Needed	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.	City-wide	FY15	Completed within schedule	X	X	X	X	X	X	X	Streets and Roads	T&SW with DSD and PWD
CSD-NS-05	Optional Must be Triggered	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.	City-wide	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

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-NS-06	Optional Needed	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.	City-wide Residential Areas	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X		Residential Areas	T&SW with DSD, PUD, PWD, & local water agencies
CSD-NS-07	Optional Needed	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.	City-wide Residential and Commercial Areas	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-NS-08	Optional Needed	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.	City-wide Residential and Commercial Areas	FY16	Continuous-Ongoing	X	X	X	X	X	X		Residential and Commercial Areas	T&SW with DSD, PUD, PWD, & local water agencies
CSD-NS-09	Optional Needed	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.	City-wide Residential Areas	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X		Residential Areas, Irrigation Runoff	T&SW with DSD, PUD, PWD, & local water agencies

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-NS-10	Optional Needed	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.	City-wide Residential and Commercial Areas	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-NS-11	Optional Needed	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.	City-wide	FY16	Continuous-Ongoing	X		X	X			X	Waste Disposal, Parks and Recreation	T&SW; Park and Rec

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CSD-NS-12	Optional Must be Triggered	Coordinate with Parks and Recreation to install trash bins, pet waste bag dispensers and pickup services along the Rose Creek Bicycle Path and Rose Canyon Bicycle Path.	The City will expand the current service levels for refuse collection and disposal in conjunction with enhanced education and outreach efforts regarding personal responsibility for trash and litter control. The City will also explore opportunities for the addition of refuse containers that can be served with collection by local community groups including the Friends of Rose Creek or through services contracted by a community initiated Maintenance Assessment District. 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, 4) consensus and community support has been achieved, and 5) resources, such as a coordinator or project manager, in addition to funding through the City's General Fund, partnerships with community groups, and/or grant funding are secured. All General Funds are secured on an annual basis and are contingent upon annual budget approval by City Council. Once initiated, planning to initial implementation is expected to be 2 years. If effective, continued implementation will be considered.	Mission Bay WMA (Rose Canyon)	Must be triggered	Continuous if effective and as funding allows	X	X		X				Waste Disposal	Friends of Rose Creek

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-NS-13	Optional Needed	Coordinate with Parks and Recreation Department on 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.	Otay River HU (San Diego Bay WMA)	Prior to FY16	Continuous-Ongoing	X		X	X			X	Waste Disposal, Parks and Recreation	Parks and Rec

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-NS-14	Optional Must be Triggered	Develop a targeted education and outreach program for homeowners with orchards or other agricultural land uses on their property.	Educate residents on practices of small-scale or on-site composting to protect local water quality. May include targeted education of owners of chickens. Outreach can be coordinated through the San Diego County Agriculture, Weights, and Measures division. 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 manager and educational staff or contractors. 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 5 years. If effective, continued implementation will be considered.	Tijuana River WMA	Must be triggered	Continuous if effective and as funding allows	X	X		X	X	X		Rural Residential, Agriculture	T&SW with County of San Diego Ag, Weights, and Measures
CSD-NS-15	Optional Needed	Coordinate and work with Parks and Recreation, where appropriate, to ensure that the City is not creating erosion issues.	The Storm Water Department Division will work and coordinate with the Parks and Recreation Open Space Division, where appropriate, to address erosion issues. May include the continued maintenance of brow ditches. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Mission Bay WMA	FY16	Continuous-Ongoing	X	X			X		X	Parks and Recreation, Open Space	T&SW with Parks and Rec
CSD-NS-16	Optional Needed	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.	City-wide	FY15	Completed within schedule	X	X	X	X	X	X	X	Variable	T&SW

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-NS-17	Optional Needed	Address and clean up trash from transient encampments with collaboration from the Environmental Services Department, which consults with the Homeless Outreach Team.	Coordinate with the Environmental Services Department, in conjunction 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.	City-wide	FY16	Continuous-Ongoing	X	X		X			X	Transient Encampments	T&SW with Police, ESD, Urban Corps, Alpha Project
CSD-NS-18	Optional Needed	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.	City-wide	Prior to FY16	Continuous-Ongoing			X					Variable	T&SW
CSD-NS-19	Optional Needed	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.	City-wide	FY18	Continuous-Ongoing			X					Automotive	T&SW, ESD with PWD (Fleet Services)

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-NS-20	Optional Must be Triggered	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.	Chollas Watershed	Must be triggered	Continuous if effective and as funding allows			X					Commercial and Industrial Areas, Metal	TBD
CSD-NS-21	Optional Must be Triggered	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.	Chollas Watershed	Must be triggered	Continuous if effective and as funding allows			X					Commercial, Industrial, and Residential Areas, Metal	TBD

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-NS-22	Optional Needed	Coordinate with appropriate City Departments that monitor for erosion, and complete minor repair and slope stabilization on municipal property.	Coordinate with Streets Division and other appropriate City Departments that 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.	City-wide	FY16	Continuous-Ongoing	X	X			X		X	Municipal, Hydromodification	T&SW
CSD-NS-23	Optional Needed	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.	City-wide	FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Variable	T&SW
CSD-NS-24	Optional Needed	Lower Tijuana River WMA Sediment Source Characterization Study	The study will provide an inventory and descriptions of sediment sources in the lower Tijuana River Watershed Management Area. The study will utilize a combination of pre-and post-storm visual observations and sediment load measurements. The study will focus on municipal properties; unmaintained yards; dirt roads, trails, and unpaved alleys; large commercial areas; and other significant developed or impervious areas. The study will build upon the findings of the Tijuana River Watershed Technical Support Document for Solids, Turbidity and Trash TMDLs (2010). Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Tijuana River WMA	FY16	One time	X	X			X			Variable	T&SW, TJ WMA Copermittees

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-NS-25	Optional Needed	Los Peñasquitos Watershed Special Study	Los Peñasquitos WMA special study will assess sediment loads in the watersheds upstream of the Draft Sediment TMDL compliance monitoring locations. Includes the analysis of sediment water column loads, stream bedload, and air monitoring. Implemented in a phased approach. Monitoring will occur first in the Carroll Canyon subwatershed. The Los Peñasquitos Creek and Carmel Valley Creek subwatersheds will be monitored in subsequent phases. Refer to Section 5.1 for further details. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Los Peñasquitos WMA	FY16	One time	X	X			X			Variable	T&SW
CSD-NS-26	Optional Needed	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.	Region-wide	Prior to FY16	Completed within schedule	X	X						N/A	T&SW, SCCWRP, Regional copermittees
CSD-NS-27	Optional Needed	Participate in Reference Beach Study.	The San Diego Regional Reference Beach Study (currently being conducted by the Southern California Coastal Water Research Project) will develop numeric targets that account for “natural sources” to establish the concentrations or loads from the beach in a minimally disturbed or “reference” condition. The purpose of this monitoring program is to advise the public of potential health risks that could occur with water contact recreation at local beaches. DEH will post a health advisory notice or close a beach when FIB results are above REC-1 water quality standards. Will occur region-wide in the Los Peñasquitos, San Dieguito River, Mission Bay, and San Diego River WMAs. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Region-wide (Los Peñasquitos, San Dieguito River, Mission Bay, and San Diego River WMAs)	Prior to FY16	One time	X	X						Variable	T&SW, SCCWRP, Regional copermittees

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CSD-NS-28	Optional Needed	Tecolote Creek Quantitative Microbial Risk Assessment (QMRA).	The Tecolote Creek Quantitative Microbial Risk Assessment (QMRA) is currently being conducted in response to the Bacteria TMDL. The study is designed to characterize the predominance of non-human sources in the watershed, quantify the potential risks associated with water contact recreation (e.g., swimming), and, if appropriate, calculate WQOs to reflect the watershed's site-specific conditions. Refer to Section 5.1 for further details. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Mission Bay WMA (Tecolote Creek)	FY16	One time	X	X						Variable	T&SW
CSD-NS-29	Optional Needed	San Dieguito Source Identification and Prioritization Process	Assess sources of bacteria in the watersheds using the San Diego Bacteria Source Identification and Prioritization Process developed in 2012 as part of the MS4 Permit Report of Waste Discharge process. Focus is on the beach/lagoon area of the San Dieguito River WMA, with inputs from the upper watershed also considered where relevant and necessary to identify sources of bacteria to the beach/lagoon. Refer to Section 5.1 for further details. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	San Dieguito River WMA	FY16	One time	X	X						Variable	T&SW
CSD-NS-30	Optional Needed	Collaborate with City of San Diego PUD and other watershed stakeholders in the Lake Hodges Water Quality Concentration Study. Study will characterize conditions and identify sources.	The City of San Diego's Public Utilities Department will conduct studies that can characterize the nutrient budget or "loading rate" for Lake Hodges. The proper characterization of nutrient loads to Lake Hodges include two components: (1) Uninterrupted sampling during storm events or high water flow to Lake Hodges; and (2) Independent characterizations of nitrogen and phosphorus loads to the reservoir. This strategy will include collaboration with other watershed stakeholders. 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.	San Dieguito River WMA	FY17	Completed within schedule in 2 yrs.	X	X				X		Variable	T&SW with PUD; Funding from Prop 50, Prop 80, etc. Other San Dieguito River WMA Responsible Agencies

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CSD-NS-31	Optional Needed	Using adaptive management, delist the beach segment from the TMDL and Attachment E of the MS4 Permit.	Using the adaptive management process outlined in Section 6, remove 303(d) delisted beach segments from the Bacteria TMDL and Attachment E of the MS4 Permit. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Los Peñasquitos, San Dieguito River, and Mission Bay WMAs	FY16	Continuous-Ongoing								N/A	T&SW, Potential Stakeholders, Coastkeeper
CSD-NS-32	Optional Needed	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.	City-wide	FY16	Completed within schedule								Variable	TBD
CSD-NS-33	Optional Must be Triggered	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.	City-wide	Must be triggered	Completed within schedule								Variable	T&SW and public participation

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CSD-NS-34	Optional Must be Triggered	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.	City-wide	Must be triggered	Continuous as funding allows	X	X		X			X	Transient Encampments	T&SW

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CSD-NS-35	Optional Must be Triggered	Identify strategy, resources, and funding to support mapping and assessment of agricultural operations.	Prepare and maintain an inventory of the locations of agricultural operations. Identify agricultural land close to receiving waters and/or MS4 system and conducting a site reconnaissance to assess if discharges are likely to occur and develop a series of follow-up actions specific to those risks. Coordinate with other City of San Diego departments that own and lease land for agricultural uses. 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, development of the program is expected in 2 years.	San Dieguito River WMA above Lake Hodges and Tijuana River WMA	Must be triggered	Continuous as funding allows	X	X	X	X	X	X	X	Agriculture	PUD with T&SW

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CSD-NS-36	Optional Must be Triggered	Coordinate with County of San Diego and identify resources and funding to implement a program to target on-site wastewater treatment (septic) systems. May include mapping and risk assessment, inspection, or maintenance practices.	Coordinate with County of San Diego program. The extent, age, and location of on-site systems are generally not well documented. Recommended first step is to inventory and map all of the on-site systems. Techniques involve cross-referencing addresses for customers of central sewer provides with addresses of properties on the associated tax assessor's list, and identifying those addresses without a sewer account. Once on-site systems have been identified, the following parameters can be estimated or analyzed for risk assessment: location on the property, system age (from permit or property tax records), soil and slope conditions, development densities, and proximity to surface and groundwater resources. 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, development of the program is expected in 2 years.	San Dieguito River WMA	Must be triggered	Continuous as funding allows	X	X	X	X	X	X		Septic Systems	T&SW with County of San Diego

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CSD-NS-37	Optional Must be Triggered	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.	City-wide	Must be triggered	Completed within schedule	X	X	X	X	X	X		Variable	Planning Dept. with T&SW, SANDAG, and Nature Conservancy

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CSD-NS-38	Optional Must be Triggered	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.	City-wide	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

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CSD-NS-39	Optional Must be Triggered	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.	City-wide	Must be triggered	Continuous as funding allows	X	X	X	X	X	X	X	Open Space Areas, Residential Areas	TBD

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CSD-NS-40	Optional Must be Triggered	Add permanent open spaces protections to underdeveloped city-owned land in and on the rim of all canyons, including but not limited to Rose Canyon, San Clemente Canyon, Gilman Canyon, and Carroll Canyon.	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.	Mission Bay WMA	Must be triggered	Continuous as funding allows	X	X	X	X	X	X	X	Open Space Areas, Residential Areas	TBD

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CSD-NS-41	Optional Must be Triggered	Add permanent open space protection to undeveloped land in the Mission Bay watershed.	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.	Mission Bay WMA	Must be triggered	Continuous as funding allows	X	X	X	X	X	X	X	Open Space Areas, Residential Areas	TBD

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CSD-NS-42	Optional Must be Triggered	Forming a linear “park” from the southern end of Marian Bear Natural Park to the mouth of Rose Creek.	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. Once initiated and land is acquired, design and construction is expected to take 4 years. Operation and maintenance will be in perpetuity.	Mission Bay WMA (Rose Canyon)	Must be triggered	Continuous-Ongoing	X	X	X	X	X	X	X	Parks and Recreation	TBD

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CSD-NS-43	Optional Must be Triggered	Lake Hodges Natural Treatment System Project	This strategy may be implemented at any time at the City's discretion. This strategy will coordinate with watershed stakeholders on Integrated Regional Water Management (IRWM) Proposition 84 funding grant project to model the Lake Hodges watershed (hydrology and water quality loading) to assist in siting locations for nutrient reducing BMPs. Recommendations include using the 85th percentile event for sizing multiuse treatment area BMPs, locating and defining baseflow within key reaches. Resources necessary to implement this strategy include City staff time for coordination with the collaborative effort. 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. Proposition 84 grant application has been submitted. Granttees will be identified in FY2016.	San Dieguito River WMA (Lake Hodges)	Must be triggered	Continuous as funding allows	X	X						Variable	T&SW
CSD-NS-44	Optional Must be Triggered	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.	City-wide	Must be triggered	Continuous as funding allows	X	X	X	X	X	X	X	Variable	TBD

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CSD-NS-45	Optional Must be Triggered	City coordination with the Mission Bay Wetland Initiative.	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 City staff time for coordination. 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. Implementation would be in perpetuity as long as funding or City staff availability is retained.	Mission Bay WMA	Must be triggered	Continuous as funding allows	X	X	X	X	X	X	X	Variable	TBD
CSD-NS-46	Optional Must be Triggered	Collaborate with stakeholders to identify funding opportunities including the preparation and competition for grants or involvement with existing groups, such as the Integrated Regional Water Management (IRWM) group.	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 City staff time for coordination. 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. Implementation would be in perpetuity as long as funding is retained.	Mission Bay WMA	Must be triggered	Continuous as funding allows	X	X	X	X	X	X	X	Variable	TBD
CSD-NS-47	Optional Needed	Coordinate with Development Services Department to 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 Arundo donax and Cortaderia selloana 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.	City-wide	Prior to FY16	Continuous-Ongoing	X				X	X	X	Land Development, Landscaping	T&SW with DSD

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CSD-NS-48	Optional Must be Triggered	Collaborate with watershed stakeholders to plan and implement projects that will further Los Peñasquitos Lagoon restoration efforts and reduce flooding in the lower watershed.	Efforts may include 1) dredging of tidal channels and inlet area to restore and maintain tidal circulation and facilitate draw down times of floodwater in the lagoon and 2) modeling and/or studies to analyze sediment transport and flood control options. This strategy may be implemented at any time at the City's discretion if the following triggers are met: 1) funding is identified and secured, 2) staff resources are identified and secured, 3) partners have been identified and formal MOUs are developed and executed, 4) permits required by regulatory agencies are secured, and 5) consensus and community support is 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 3 years. Implementation would be in perpetuity as long as funding is retained.	Los Peñasquitos WMA	Must be triggered	Continuous as funding allows	X	X	X	X	X	X	X	Land Develolopment, Hydromodificati on	T&SW

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CSD-NS-49	Optional Needed	Los Peñasquitos Wetland Restoration Project	Collaborate with Copermittees on the region-wide North Coast Corridor (NCC) Program, led by Caltrans and SANDAG. The program is intended to improve coastal transportation (including Interstate 5 and the coastal rail and transit system) while protecting and restoring coastal habitats throughout the corridor. The 27-mile-long project stretches across the cities of Oceanside, Carlsbad, Encinitas, Solana Beach, Del Mar, and San Diego and provides improvements for six coastal lagoons, including Los Peñasquitos Lagoon. The NCC Program is implementing construction in phases from 2010 through 2040. The program is a $6.5-billion investment in the region that will be paid for through a combination of federal, state, and local funds. The NCC program is part of TransNet, the voter-approved, half-cent sales tax initiative that helps fund transportation projects in the region. 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.	Los Peñasquitos WMA	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Roads, Streets, Highways, and Parking; Land Development; Hydromodification	T&SW, Copermittees, SANDAG, TransNet

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-NS-50	Optional Needed	San Dieguito Wetland Restoration Project	Collaborate with Copermittees and organizers of the San Dieguito River Park (SDRP) to restore the San Dieguito coastal wetlands and lagoon system. The 150-acre wetland restoration work has been primarily accomplished by Southern California Edison (SCE) and partner owners of the San Onofre Nuclear Generating Station (SONGS), including San Diego Gas & Electric (SDG&E), City of Riverside, and City of Anaheim. Construction began in fall 2006 and the $90-million Restoration Project was officially dedicated in 2011. Funding for monitoring and managing the wetlands is ongoing. 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.	San Dieguito River WMA	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Variable	T&SW, City of Del Mar, SCE, SDG&E, SONGS
CSD-NS-51	Optional Needed	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, 2) enforcement of the Ag Waiver, 3) enforcement of other non-MS4 dischargers, and 4) Bacteria TMDL updates, as appropriate for each WMA. 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.	City-wide	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Variable	T&SW, WMA Copermittees

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-NS-52	Optional Needed	Collaborate with Metals TMDL RPs and the Regional Board to Adopt Site Specific Objectives	Collaborate with the Metals TMDL RPs, the Regional Board, and water 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.	Chollas Creek	Prior to FY16	Continuous-Ongoing			X					N/A	TMDL RPs, Regional Board
CSD-NS-53	Optional Needed	Refinement of Water Quality Regulations	Collaborate with other Responsible Agencies and the Regional Board to refine the accuracy of regulations to ensure that Non-MS4 dischargers are regulated appropriately. The goal of this exercise is to begin a dialog with the Regional Board that may lead to the following outcomes: 1) Removal of Non-MS4 discharges and the associated BMPs needed to treat those discharges from the Responsible Agencies' burden, 2) amendment of current TMDLs and the MS4 Permit to correctly assign responsibilities for Non-MS4 discharges to the appropriate entities, and 3) strengthening of Non-MS4 NPDES permits that are directly tied to the requirements of existing and future TMDLs. 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. Resources to implement this strategy include staff time and are currently secured.	Los Peñasquitos, Mission Bay, and San Diego River WMAs	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Variable	T&SW, WMA Copermittees

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-NS-54	Optional Needed	Collaboration with Federal, State and Local Agencies	Collaboarate with RAs to implement projects within the WMA that improve water quality. These collaborations include working with the following: U.S. IBWC, Binational Task Force; U.S EPA Border 2020; Good Neighbor Environmental Board (GNEB); and, TRNERR advisory council Resources necessary to implement this strategy includes participating jurisdictional staff, funding, support from international/community groups, other institutions, or jurisdictional General Funds. Participation is dependent on funding availability. Funding and resources have been secured for FY16. Funding for future fiscal years is contingent on annual budget approval by each Responsible Agency.	Tijuana River WMA	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Variable	T&SW, Copermittees, Federal, State, and Local Agencies

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-NS-55	Optional Must be Triggered	Tijuana River Valley Recovery Team (TRVRT) Project Tier I Strategy: Reclamation of the Nelson Sloan Quarry	Collaborate with the County of San Diego to reclaim the Nelson Sloan Quarry using sediment excavated in the Tijuana River Valley; a viable alternative to current sediment management transport and disposal practices. Resources necessary to implement this strategy includes participating jurisdictional staff, development of a maintenance and operation plan, development of preliminary design plans, CEQA review, and development of final construction documents. Project funding needs may be met through grant funding (e.g. California Coastal Conservancy), support from international/community groups, other institutions, or jurisdictional General Funds. General funds are contingent on approval of the annual budget by City Council or appropriate legislative body (e.g. the Board). Participation is dependent on funding availability. Once these steps have been completed, additional funding and other logistical support will be needed to construct the site for sediment deposition, management, and operation. The Regional Board, with support from the Responsible Agencies and the other TRVRT members, submitted a $500,000 request to the State Board for Cleanup and Abatement Account (CAA) activities.	Tijuana River WMA	Must be triggered	Continuous-Ongoing					X			Variable	T&SW, Copermittees,TRVRT

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-NS-56	Optional Must be Triggered	Tijuana River Valley Recovery Team (TRVRT) Project Tier I Strategy: Brown Property Restoration	Collaboare with Tijuana River WMA Responsible Agencies, the Regional Board, other TRVRT members, and the US Army Corps of Engineers to develop a hydrology study for the Brown Proproty on Holister Avenue.Historic placement of unauthorized fill has resulted in significant impacts to the hydrologic function of the Tijuana River. Removal of the unauthorized fill and restoration of the site to riparian forest floodplain at the Brown Property on Hollister Avenue would substantially improve the hydrology of the Tijuana River Valley and reduce flooding risk. Resources necessary to implement this strategy include a focused hydrology study, CEQA review and permitting of the fill removal and restoration to ensure impacts are mitigated and an appropriate, sustainable, post-project design is developed for the restoration of the site, and funding; through grants, or jurisdictional General Funds. General funds are contingent on approval of the annual budget by City Council or appropriate legislative body (e.g. the Board). Participation is dependent on funding availability. Additional planning activities are needed to secure funding, prepare a hydrology study, prepare a feasibility study, develop preliminary design plans, perform a CEQA review, and develop final construction documents. Once these steps are complete, additional resources will be needed to begin fill removal and other restoration work, and manage the restored property. The Regional Board has requested $300,000 to prepare a hydrology study, feasibility study, and environmental documents. The City of San Diego, with support from the other Tijuana River WMA Responsible Agencies and other TRVRT members, is working with the US Army Corps of Engineers to develop a scope of work for a hydrology study. This process is estimated to be 24-36 months.	Tijuana River WMA	Must be triggered	Continuous-Ongoing	X	X	X	X	X	X	X	Variable	T&SW, Copermittees,TRVRT

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-NS-57	Optional Must be Triggered	Tijuana River Valley Recovery Team (TRVRT) Project Tier I Strategy: Preparation of a Sediment Management Plan for the Tijuana River Valley	Collaborate with the County of San Diego, California State Parks, and other NGOs to continue excavating sediment and trash in several locations throughout the Tijuana River Valley. Sediment disposal is currently conducted at landfills at a cost of approximately $100/ton. A number of sediment management options may be explored as part of a comprehensive sediment management plan including: reclamation of the Nelson Sloan quarry, beach replenishment, construction and other fill and potential cooperative agreements with Mexico for cost-efficient reuse. Resources necessary to implement this strategy includes participating jurisdictional staff. Project funding needs may be met through grant funding (e.g. California Coastal Conservancy), support from International/community groups, other institutions, or jurisdictional General Funds. General funds are contingent on approval of the annual budget by City Council or appropriate legislative body (e.g. the Board). Participation is dependent on funding availability. The Regional Board's CAA request included $300,000 to prepare the sediment management plan. This funding is needed to identify regulatory requirements, processing and costing options.	Tijuana River WMA	Must be triggered	Continuous-Ongoing				X	X			Variable	T&SW, Copermittees,TRVRT
CSD-NS-58	Optional Must be Triggered	Tijuana River Valley Recovery Team (TRVRT) Project Tier I Strategy: Tijuana River Valley Recovery Team Mission Support	Collaborate with other Tijuana River WMA Responsible Agencies and the Regional Board to provide dedicated administrative services, facilitation, translation, website enhancements, and mapping are needed to support the multi-agency needs of the Recovery Team. Project funding needs may be met through grant funding (e.g. California Coastal Conservancy), support from International/community groups, other institutions, or jurisdictional General Funds. Th Regional Board's CAA $300,000 request will fund contractor support for administration, facilitation, and translation needs for a period of two years.	Tijuana River WMA	Must be triggered	Continuous-Ongoing	X	X	X	X	X	X	X	Variable	T&SW, Copermittees,TRVRT

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-NS-59	Optional Must be Triggered	Tijuana River Valley Recovery Team (TRVRT) Project Tier I Strategy: Targeted Sediment and Trash Removal Projects	Collaborate with the County of San Diego and Imperial Beach to participate in various sediment and trash removal projects, both through financial and staff contributions. Resources necessary to implement this strategy includes NGO coordination, Volunteers and funding; through grants, or jurisdictional General Funds. General funds are contingent on approval of the annual budget by City Council or appropriate legislative body (e.g. the Board). Participation is dependent on funding availability. The Regional Board's CAA request included $150,000 to support additional cleanup activities. It is anticipated that this approach may provide synergy with other sediment and trash source control efforts and lead to long-term improvements to water quality.	Tijuana River WMA	Must be triggered	Continuous-Ongoing				X	X			Variable	T&SW, Copermittees,TRVRT
CSD-NS-60	Optional Must be Triggered	Coordinate with Development Services Department to implement Sustainable Landscapes Program to encourage landscape retrofits.	Collaborate with other San Diego River WMA Responsible Agencies to implement a Sustainable Landscapes Program. Implementation of this strategy may be triggered if (1) an interim goal has not been met, (2) it has been determined though adaptive management that implementation is necessary, and (3) all of the resources have been identified and secured. The following resources must be secured for each fiscal year that this program is implemented: (1) Partners must be identified and each partner must agree to terms of partnership, (2) funding must be identified and secured by each of the partners for their portion of the overall cost, (3) staff resources must be identified and secured, (4) the scope of the program (target location(s), type and value of incentives, etc.) must be identified, and (5) consensus and community support has been achieved.	San Diego River WMA	Must be triggered	Continuous-Ongoing	X	X	X		X			Commercial, Industrial, Municipal, and Residential Areas; Irrigation Runoff	T&SW with DPW, San Diego River Copermittees

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-NS-61	Optional Must be Triggered	Implement wastewater management program to prevent sanitary sewer overflows.	Collaborate with other San Diego River WMA Responsible Agencies to implement wastewater management strategies targeting Fats, Oils, and Grease (FOG) to reduce sanitary sewer overflows (SSOs). Develop and print guidance materials that address septic system maintenance and FOG management. Conduct workshops, training sessions, and other media outreach. This effort will require community support and partnerships to be established. Resources and funding include Grant funding from Proposition 1. Implementation of this strategy may be triggered if (1) an interim goal has not been met, (2) it has been determined though adaptive management that implementation is necessary, and (3) all of the resources have been identified and secured. The following resources must be secured for each fiscal year that this program is implemented: (1) Partners must be identified and each partner must agree to terms of partnership, (2) funding must be identified and secured by each of the partners for their portion of the overall cost, (3) staff resources must be identified and secured, (4) the scope of the program (target location(s), type and value of incentives, etc.) must be identified, and (5) consensus and community support has been achieved.	San Diego River WMA	Must be triggered	Completed within schedule	X	X						Sewer Infrastructure	T&SW with PUD, San Diego River Copermittees

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
Structural Strategies															
CSD-STRUCT-01	Optional Needed	Restoration of natural areas to allow water percolation, and installation of site appropriate drainage devices to protect Sunset Cliffs Natural Park from soil erosion	A feasibility study is being conducted to assess the potential to restore natural areas in Sunset Cliffs Natural Park from erosion. If the study provides feasible results, the following resources, funds, and steps are needed to implement this strategy: 1) Identify project locations and drainage improvements (2 years) 2) Secure funds in the form of general funds, bonds, or grants (2 yrs) 3) Obtain City Council approval of Capital Improvement Projects budget, City Site Development Permit and Coastal Development Permit (1 year) 4) Initiate preliminary engineering to narrow project scope (1 year) 5) Hire design consultant to develop detailed construction plans and construction cost estimates (1 year) 6) Complete construction contractor bid and award process for construction phase 7) Construct project (2-4 years). 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	Sunset Cliffs Natural Park (San Diego Bay WMA)	FY22	Continuous-Ongoing	X	X	X	X	X	X	X	Irrigation Runoff, Landscaping	T&SW with PWD, Park and Recreation

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CSD-STRUCT-02	Optional Needed	San Diego River Restoration and Trash Removal Project: The City of San Diego will implement a project involving restoration of native habitat and trash removal along 5,750 feet of the San Diego River covering approximately 57 acres. Work on this project is scheduled to begin in 2016 and be completed by 2022.	The City of San Diego will implement a project that will restore native habitat and involve trash removal along 5,750 feet of the San Diego River. The City will be completing the project design and obtaining the necessary permits and approval from City Council in FY 16. The following resources, funds, and steps are needed to implement the project by the end of FY 16:1) Hire design consultant to develop detailed construction plans and construction cost estimates 2) Complete construction contractor bid and award process for construction phase 3) Construct project 4) Operation and maintenance will be in perpetuity. Funds and staff resources for this function will be approved by City Council as part of the City's annual budget	San Diego River WMA	FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Waste Disposal, Commercial, Industrial, Municipal, and Residential Areas	T&SW with PUD
Green Infrastructure															
CSD-GI-01	Optional Needed	Green Lot in Kellogg Park.	Green lot of 0.6 acres includes infiltrative treatment systems (porous pavement and bioretention areas) to treat a drainage area of 8.9 acres. This project has been constructed. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Mission Bay WMA (Scripps)	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X		Publicly Owned Parks	T&SW with PWD

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-GI-02	Optional Needed	Green infrastructure treatment on public parcels with approximately 2.28 acres of bioretention and 0.35 acres of permeable pavement to treat an impervious drainage area of 182.35 acres (total drainage area of 990 ac) with a total storage volume of 8.21 ac-ft.	To meet the Tecolote subwatershed numeric goals and schedules presented in Section 4, the City of San Diego will implement the following structural strategies. By FY27, implement at least 2.28 acres of bioretention and 0.35 acres of permeable pavement or equivalent treatment capacity to treat an impervious drainage area of 182.35 acres (total drainage area of 990 ac) with a total storage volume of 8.21 ac-ft. Ramp up construction over time, constructing most efficient BMPs first and increasing BMP quantity over time. An updated inventory of green infrastructure projects will be maintained in the WQIP Annual Report. 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.	Mission Bay WMA (Tecolote Creek)	FY26	Continuous-Ongoing	X	X	X	X	X	X		Residential Areas, Municipal Areas, Publicly Owned Parks, Open Space Areas	T&SW with PWD; Potential to collaborate with transit agencies, public school districts, and state and federal agencies

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CSD-GI-03	Optional Needed	0.96 acre of bioretention have been identified as potential opportunities for green infrastructure implementation on public parcels to treat an impervious drainage area of 37.86 acres (total drainage area of 274 ac) with a total storage volume of 1.69 acre-feet.	To meet the Los Peñasquitos WMA numeric goals and schedules presented in Section 4, the City of San Diego will implement the following structural strategies. In the Carmel Valley Creek Subwatershed, staggered construction, operation, and maintenance of 0.96 acres of bioretention to treat an impervious drainage area of 37.86 acres (total drainage area of 274 ac) with a total storage volume of 1.69 acre-feet. An updated inventory of green infrastructure projects will be maintained in the WQIP Annual Report. 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.	Carmel Valley Creek Subwatershed (Los Peñasquitos WMA)	FY22	Continuous-Ongoing	X	X	X	X	X	X		Residential Areas, Municipal Areas, Publicly Owned Parks, Open Space Areas	T&SW with PWD; Potential to collaborate with transit agencies, public school districts, and state and federal agencies

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CSD-GI-04	Optional Needed	17.18 acres of bioretention have been identified as potential opportunities for green infrastructure implementation on public parcels to treat an impervious drainage area of 582.71 acres (total drainage area of 1520 ac)with a total storage volume of 27.21 acre-feet.	To meet the Los Peñasquitos WMA numeric goals and schedules presented in Section 4, the City of San Diego will implement the following structural strategies. In the Carroll Canyon Creek Subwatershed, staggered construction, operation, and maintenance of 17.18 acres of bioretention to treat an impervious drainage area of 582.71 acres (total drainage area of 1520 ac) with a total storage volume of 27.21 acre-feet. An updated inventory of green infrastructure projects will be maintained in the WQIP Annual Report. 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.	Carroll Canyon Creek Subwatershed (Los Peñasquitos WMA)	FY26	Continuous-Ongoing	X	X	X	X	X	X		Residential Areas, Municipal Areas, Publicly Owned Parks, Open Space Areas	T&SW with PWD; Potential to collaborate with transit agencies, public school districts, and state and federal agencies

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-GI-05	Optional Needed	2.40 acres of bioretention have been identified as potential opportunities for green infrastructure implementation on public parcels to treat an impervious drainage area of 145.75 acres (total drainage area of 328 ac) with a total storage volume of 6.86 acre-feet.	To meet the Los Peñasquitos WMA numeric goals and schedules presented in Section 4, the City of San Diego will implement the following structural strategies. In the Los Peñasquitos Creek Subwatershed, staggered construction, operation, and maintenance of 2.40 acres of bioretention to treat an impervious drainage area of 145.75 acres (total drainage area of 328 ac) with a total storage volume of 6.86 acre-feet. An updated inventory of green infrastructure projects will be maintained in the WQIP Annual Report. 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.	Los Peñasquitos Creek Subwatershed (Los Peñasquitos WMA)	FY26	Continuous-Ongoing	X	X	X	X	X	X		Residential Areas, Municipal Areas, Publicly Owned Parks, Open Space Areas	T&SW with PWD; Potential to collaborate with transit agencies, public school districts, and state and federal agencies

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-GI-06	Optional Needed	1.33 acres of bioretention have been identified as potential opportunities for green infrastructure implementation on public parcels to treat an impervious drainage area of 48.97 acres (total drainage area of 466 ac) with a total storage volume of 2.14 acre-feet.	To meet the Los Peñasquitos WMA numeric goals and schedules presented in Section 4, the City of San Diego will implement the following structural strategies. In the Los Peñasquitos Lagoon Subwatershed, staggered construction, operation, and maintenance of 1.33 acres of bioretention to treat an impervious drainage area of 48.97 acres (total drainage area of 466 ac)with a total storage volume of 2.14 acre-feet. An updated inventory of green infrastructure projects will be maintained in the WQIP Annual Report. 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.	Los Peñasquitos Lagoon Subwatershed (Los Peñasquitos WMA)	FY28	Continuous-Ongoing	X	X	X	X	X	X		Residential Areas, Municipal Areas, Publicly Owned Parks, Open Space Areas	T&SW with PWD; Potential to collaborate with transit agencies, public school districts, and state and federal agencies
CSD-GI-07	Optional Needed	Bioretention at Allied Gardens Recreation Area.	Bioretention designed for Allied Gardens Recreation Area to treat a drainage area of 4.5 acres. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	San Diego River WMA	FY16	Continuous-Ongoing	X	X	X	X	X	X		Residential Areas	T&SW with PWD

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-GI-08	Optional Needed	Bioretention at Famosa Slough.	Bioretention designed for Famosa Slough to treat a drainage area of 10.3 acres. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	San Diego River WMA	FY17	Continuous-Ongoing	X	X	X	X	X	X		Residential Areas, Commercial Areas, Open Space Areas	T&SW with PWD
CSD-GI-09	Optional Needed	16 acres of bioretention and 4.1 acres of permeable pavement have been identified as potential opportunities for green infrastructure implementation on public parcels to treat an impervious drainage area of 522.33 acres (total drainage area of 1510 ac) with a total storage volume of 23.97 acre-feet.	To meet the San Diego River WMA numeric goals and schedules presented in Section 3, the City of San Diego will implement the following structural strategies. Staggered construction, operation, and maintenance of 16 acres of bioretention and 4.1 acres of permeable pavement to treat an impervious drainage area of 522.33 acres (total drainage area of 1510 ac) with a total storage volume of 23.97 acre-feet. An updated inventory of green infrastructure projects will be maintained in the WQIP Annual Report. 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.	San Diego River WMA	FY22	Continuous-Ongoing	X	X	X	X	X	X		Residential Areas, Municipal Areas, Publicly Owned Parks, Open Space Areas	TBD

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-GI-10	Optional Needed	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 form 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.	Chollas Watershed	FY14	Continuous-Ongoing	X	X	X	X	X	X		Roads, Streets	T&SW with PWD
CSD-GI-11	Optional Needed	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.	Chollas Watershed	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X		Publicly Owned Parks	T&SW with PWD
CSD-GI-12	Optional Needed	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.	Chollas Watershed	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X		Commercial Area, Roads, Streets	County of San Diego
CSD-GI-13	Optional Needed	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.	Chollas Watershed	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X		Commercial Area, Roads, Streets	County of San Diego
CSD-GI-14	Optional Needed	Cabrillo Heights Rain Garden	Rain garden constructed on Kearny Villa Rd. used to treat a drainage area of 6 acres. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	San Diego River WMA	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X		Residential Areas, Open Space Areas	T&SW with PWD

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-GI-15	Optional Must be Triggered	If interim load reduction goals are not met and additional green infrastructure is required, additional publicly-owned parcels have been identified as potential opportunities for green infrastructure implementation.	Construction, operation, and maintenance of bioretention and permeable pavement on prioritized public parcels. This strategy may be triggered as 1) interim goals are not met, 2) funding to address MS4 discharges is identified and secured, and 3) staff resources are identified and 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.	Prioritized public parcels in San Dieguito River and Tijuana River WMAs	Must be triggered	Continuous-Ongoing	X	X	X	X	X	X		Residential Areas, Municipal Areas, Publicly Owned Parks, Open Space Areas	T&SW with PWD; Potential to collaborate with transit agencies, public school districts, and state and federal agencies

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-GI-16	Optional Needed	8.3 acres of bioretention and 2 acres of permeable pavement have been identified as potential opportunities for green infrastructure implementation on public parcels to treat an impervious drainage area of 298.12 acres (total drainage area of 462 ac) with a total storage volume with 13.56 acre-feet.	To meet the Chollas watershed numeric goals and schedules presented in Section 4, the City of San Diego will implement the following structural strategies. Staggered construction, operation, and maintenance of 8.3 acres of bioretention and 2 acres of permeable pavement to treat an impervious drainage area of 298.12 acres (total drainage area of 462 ac) with a total storage volume of 13.56 acre-feet. An updated inventory of green infrastructure projects will be maintained in the WQIP Annual Report. 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.	Chollas Watershed	FY18	Continuous-Ongoing	X	X	X	X	X	X		Residential Areas, Municipal Areas, Publicly Owned Parks, Open Space Areas	T&SW with PWD
Green Streets															
CSD-GS-01	Optional Needed	Mt. Abernathy Avenue	Construction, operation and maintenance of a 0.06 acre (footprint) green street project at Mt. Abernathy and Camber Drive to treat a drainage area of 19.6 acres. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Mission Bay WMA (Tecolote Creek)	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X		Roads, Streets, Commercial Areas, Residential Areas	T&SW with PWD

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-GS-02	Optional Needed	Bannock Avenue	Construction, operation and maintenance of a 0.47 acre (footprint) green street project at Bannock Avenue and Genesee Avenue to treat a drainage area of 65 acres. Funding and resources were secured for FY2014. Funding for future fiscal years is contingent on annual budget approval by City Council.	Mission Bay WMA (Tecolote Creek)	2014	Continuous-Ongoing	X	X	X	X	X	X		Roads, Streets, Commercial Areas, Residential Areas	T&SW with PWD
CSD-GS-03	Optional Needed	Callado Road	Construction, operation and maintenance of a green street project at Callado Road and Pastoral Street to treat a drainage area of 9.86 acres. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	San Dieguito River WMA (Callado Rd and Pastoral St)	FY16	Completed within schedule in FY18	X	X	X	X	X	X		Roads, Streets, Commercial Areas, Residential Areas	T&SW with PWD
CSD-GS-04	Optional Needed	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.	Chollas Watershed	FY17	Continuous-Ongoing	X	X	X	X	X	X		Roads, Streets, Commercial Areas, Residential Areas	T&SW with PWD

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-GS-05	Optional Needed	53.20 acres of green streets (26.6 acres of bioretention and 26.6 acres of pervious pavement) have been identified as potential opportunities for green street projects to treat a total drainage area of 1,746.8 acres with a total storage volume of 72.54 acre-feet.	To meet the Los Peñasquitos WMA numeric goals and schedules presented in Section 4, the City of San Diego will implement the following structural strategies. In the Carmel Valley Creek Subwatershed, staggered construction, operation and maintenance of 53.20 acres of green streets (26.60 acres of bioretention and 26.60 acres of pervious pavement) to treat a total drainage area of 1,746.8 acres with a total storage volume of 72.54 acre-feet. An updated inventory of green streets projects will be maintained in the WQIP Annual Report. 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.	Carmel Valley Creek Subwatershed (Los Peñasquitos WMA)	FY26	Continuous-Ongoing	X	X	X	X	X	X		Roads, Streets, Commercial Areas, Residential Areas	T&SW

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-GS-06	Optional Needed	55.92 acres of green streets (27.96 acres of bioretention and 27.96 acres of pervious pavement) have been identified as potential opportunities for green street projects to treat a total drainage area of 2,345.5 acres with a total storage volume of 86.16 acre-feet.	To meet the Los Peñasquitos WMA numeric goals and schedules presented in Section 4, the City of San Diego will implement the following structural strategies. In the Carroll Canyon Creek Subwatershed, staggered construction, operation and maintenance of 55.92 acres of green streets (27.96 acres of bioretention and 27.96 acres of pervious pavement) to treat a total drainage area of 2,345.5 acres with a total storage volume of 86.16 acre-feet. An updated inventory of green streets projects will be maintained in the WQIP Annual Report. 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.	Carroll Canyon Creek Subwatershed (Los Peñasquitos WMA)	FY26	Continuous-Ongoing	X	X	X	X	X	X		Roads, Streets, Commercial Areas, Residential Areas	T&SW

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-GS-07	Optional Needed	121.42 acres of green streets (60.71 acres of bioretention and 60.71 acres of pervious pavement) have been identified as potential opportunities for green street projects to treat a total drainage area of 4,128.6 acres with a total storage volume of 186.11 acre-feet.	To meet the Los Peñasquitos WMA numeric goals and schedules presented in Section 4, the City of San Diego will implement the following structural strategies. In the Los Peñasquitos Creek Subwatershed, staggered construction, operation and maintenance of 121.42 acres of green streets (60.71 acres of bioretention and 60.71 acres of pervious pavement) to treat a total drainage area of 4,128.6 acres with a total storage volume of 186.11 acre-feet. An updated inventory of green streets projects will be maintained in the WQIP Annual Report. 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.	Los Peñasquitos Creek Subwatershed (Los Peñasquitos WMA)	FY24	Continuous-Ongoing	X	X	X	X	X	X		Roads, Streets, Commercial Areas, Residential Areas	T&SW

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-GS-08	Optional Needed	9.06 acres of green streets (4.53 acres of bioretention and 4.53 acres of pervious pavement) have been identified as potential opportunities for green street projects to treat a total drainage area of 12.37 acres.	To meet the Los Peñasquitos WMA numeric goals and schedules presented in Section 4, the City of San Diego will implement the following structural strategies. In the Los Peñasquitos Lagoon Subwatershed, staggered construction, operation and maintenance of 9.06 acres of green streets (4.53 acres of bioretention and 4.53 acres of pervious pavement) to treat a total drainage area of 12.37 acres. An updated inventory of green streets projects will be maintained in the WQIP Annual Report. 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.	Los Peñasquitos Lagoon Subwatershed (Los Peñasquitos WMA)	FY26	Continuous-Ongoing	X	X	X	X	X	X		Roads, Streets, Commercial Areas, Residential Areas	T&SW

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-GS-09	Optional Needed	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.	To meet the Chollas watershed numeric goals and schedules presented in Section 4, the City of San Diego will implement the following structural strategies. 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. An updated inventory of green streets projects will be maintained in the WQIP Annual Report. 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.	Chollas Watershed	FY18	Continuous-Ongoing	X	X	X	X	X	X		Roads, Streets, Commercial Areas, Residential Areas	T&SW

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-GS-10	Optional Needed	43.61 acres of green streets (35.77 acres of bioretention and 7.84 acres of permeable pavement) have been identified as potential opportunities for green street projects to treat a total drainage area of 10,715.24 acres with a total storage volume of 88.02 acre-feet.	To meet the San Diego River WMA numeric goals and schedules presented in Section 3, the City of San Diego will implement the following structural strategies.Staggered construction, operation and maintenance of 43.61 acres of green streets (35.77 acres of bioretention and 7.84 acres of permeable pavement) to treat a total drainage area of 10,715.24 acres with a total storage volume of 88.02 acre-feet. An updated inventory of green streets projects will be maintained in the WQIP Annual Report. 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.	San Diego River WMA	FY24	Continuous-Ongoing	X	X	X	X	X	X		Roads, Streets, Commercial Areas, Residential Areas	TBD

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-GS-11	Optional Must be Triggered	If interim load reduction goals are not met and additional green infrastructure is required, the additional acreage of bioretention and permeable pavement may be implemented through green streets if potential opportunities for green infrastructure implementation on public parcels are not available.	This strategy may be triggered as 1) interim goals are not met, 2) funding to address MS4 discharges is identified and secured, and 3) staff resources are identified and 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.	San Dieguito River and Tijuana River WMAs	Must be triggered	Continuous-Ongoing	X	X	X	X	X	X		Roads, Streets, Commercial Areas, Residential Areas	T&SW with PWD

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
Multiuse Treatment Areas															
Infiltration and Detention Basins															
CSD-MUTA-01	Optional Needed	Multiuse Treatment Area BMPs in Tecolote Creek.	To meet the Tecolote Creek subwatershed numeric goals and schedules presented in Section 4, the City of San Diego will implement the following structural strategies. Modeled MUTA BMPs with footprints of 6.0 acres (ac) in FY24 (total drainage area of 6,032 ac with a total storage volume of 18.0 ac-ft), 11.4 ac in FY25 (total drainage area of 5,642 ac with a total storage volume of 34.2 ac-ft), 1.36 ac in FY26 (total drainage area of 97 ac with a total storage volume of 2.7ac-ft), 0.22 ac in FY27 (total drainage area of 21 ac with a total storage volume of 0.7 ac-ft), and 1.0 ac in FY28 (total drainage area of 72 ac with a total storage volume of 2.0 ac-ft). These can be wetland, infiltration, retention and/or detentions systems. An updated inventory of MUTA projects will be maintained in the WQIP Annual Report.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.	Mission Bay WMA (Tecolote Creek)	FY24, 25, 26, 27, 28	Continuous-Ongoing	X	X	X	X	X	X		Publicly Owned Park, Open Space Area, Residential Area	T&SW with PWD

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-MUTA-02	Optional Must be Triggered	Multiuse Treatment Area BMPs in Scripps.	To meet the Scripps subwatershed numeric goals and schedules presented in Section 4, the City of San Diego will implement the following structural strategies. Modeled MUTA BMPs with a total footprint of 2.02 acres to treat a total drainage area of 313.3 acres with a total storage volume of 6.0 ac-ft. These can be wetland, infiltration, retention and/or detentions systems. An updated inventory of MUTA projects will be maintained in the WQIP Annual Report.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.	Mission Bay WMA (Scripps)	Must be triggered	Continuous-Ongoing	X	X	X	X	X	X		Publicly Owned Park, Residential Area	T&SW with PWD

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-MUTA-03	Optional Needed	Multiuse Treatment Area BMPs in Los Peñasquitos WMA.	To meet the Los Peñasquitos WMA numeric goals and schedules presented in Section 4, the City of San Diego will implement the following structural strategies. Modeled MUTA BMPs with footprints of 7.3 acres (ac) in FY21 (total drainage area of 871 ac), 4.7 ac in FY22 (total drainage area of 9,372 ac), 3.0 ac in FY23 (total drainage area of 280 ac), 3.6 ac in FY24 (total drainage area of 559 ac), 5.0 ac in FY25 (total drainage area of 449 ac), and 0.3 ac in FY26 (total drainage area of 49.4 ac). These can be wetland, infiltration, retention and/or detentions systems. An updated inventory of MUTA projects will be maintained in the WQIP Annual Report.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.	Los Peñasquitos WMA	FY21, FY22, FY23, FY24, FY25, FY26	Continuous-Ongoing	X	X	X	X	X	X		Industrial Area, Residential Area, Municipal Area, Open Space Area, Publicly Owned Park	T&SW with PWD

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-MUTA-04	Optional Needed	Ashley Falls	In the Los Peñasquitos Creek Subwatershed, a 0.35 acre retention basin (large scale storm storage) designed to capture a drainage area of 29.7 acres. 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.	Los Peñasquitos Creek Subwatershed (Los Peñasquitos WMA)	FY19	Continuous-Ongoing	X	X	X	X	X	X		Publicly Owned Park, Open Space Area, Residential Area	T&SW with PWD

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-MUTA-05	Optional Needed	Los Peñasquitos Lagoon Sediment Basin	In the Los Peñasquitos Creek Subwatershed, construction of a custom-designed basin to maximize sediment interception from Los Peñasquitos Creek, while minimizing effects on surrounding habitat and protecting nearby developments from flooding and preserving view corridors of nearby residents (Los Peñasquitos Lagoon Sediment Basin Monitoring & Maintenance Plan). Total footprint for this basin is 1.5 acres designed to treat a drainage area of 77 acres (Total drainage area (Ac) treated was corrected. Additional analysis will be completed to confirm if additional acres of drainage area are required. Findings will be presented in a future WQIP Annual Report). Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Los Peñasquitos Creek Subwatershed (Los Peñasquitos WMA)	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X		Industrial Area, Residential Area, Municipal Area, Open Space Area	T&SW with PWD

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-MUTA-06	Optional Needed	Multiuse Treatment Area BMPs in the Chollas Watershed.	To meet the Chollas watershed numeric goals and schedules presented in Section 4, the City of San Diego will implement the following structural strategies. Modeled MUTA BMPs with a total footprint of 6.2 acres to treat a total drainage area of 441 acres. These can be wetland, infiltration, retention and/or detentions systems. An updated inventory of MUTA projects will be maintained in the WQIP Annual Report.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.	Chollas Watershed	FY18	Continuous-Ongoing	X	X	X	X	X	X		Publicly Owned Park, Residential Area	T&SW with PWD

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-MUTA-07	Optional Needed	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.	Chollas Watershed	FY14	Continuous-Ongoing	X	X	X	X	X	X		Publicly Owned Park	T&SW with PWD

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-MUTA-08	Optional Must be Triggered	Otay Mesa Drainage Improvements - Detention Basin	New detention basin per Otay Mesa Community Plan update EIR. Address recurrent roadway flooding problems by improving surface and/or subsurface drainage facilities in conjunction with private development or redevelopment projects. 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.	Tijuana River WMA	Must be triggered	Continuous-Ongoing	X	X	X	X	X	X		Commercial Area, Residential Area	T&SW with PWD

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-MUTA-09	Optional Needed	Multiuse Treatment Area BMPs in the San Diego River WMA.	To meet the San Diego River WMA numeric goals and schedules presented in Section 3, the City of San Diego will implement the following structural strategies. Modeled MUTA BMPs with footprints of 4.3 acres (ac) in FY19 (total drainage area of 571 ac), 18.6 ac in FY20 (total drainage area of 1309 ac), 5.3 ac in FY21 (total drainage area of 591 ac), and 2.3 ac in FY22 (total drainage area of 315 ac). These can be wetland, infiltration, retention and/or detentions systems. An updated inventory of MUTA projects will be maintained in the WQIP Annual Report.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.	San Diego River WMA	FY19, FY20, FY21, FY22	Continuous-Ongoing	X	X	X	X	X	X		Publicly Owned Parks, Residential Areas, Municipal Areas, Industrial Areas	T&SW with PWD

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-MUTA-10	Optional Must be Triggered	If interim load reduction goals are not met and additional multiuse treatment areas are required, an infiltration basin may be implemented on open space across from San Pasqual Union Elementary School can be implemented upon detailed site assessment.	Construction, operation and maintenance of an Infiltration basin that would treat a total drainage area of 5,818 acres on 19 acres of available space. This strategy may be triggered as 1) interim goals are not met, 2) funding to address MS4 discharges is identified and secured, and 3) staff resources are identified and 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.	San Dieguito River WMA (Rockwood Rd and Public Rd)	Must be triggered	Continuous-Ongoing	X	X	X	X	X	X		Open Space Area, Residential Area	T&SW with PWD

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-MUTA-11	Optional Must be Triggered	If interim load reduction goals are not met and additional multiuse treatment areas are required, an infiltration basin may be implemented on open space between I-15 and West Bernardo Drive.	Construction, operation and maintenance of an infiltration basin that would treat a total drainage are of 146 acres on 6.0 acres of available space. The site is centrally located in the San Dieguito WMA, between I-15 and West Bernardo Drive (south of the Ed Brown Center). This strategy may be triggered as 1) interim goals are not met, 2) funding to address MS4 discharges is identified and secured, and 3) staff resources are identified and 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.	San Dieguito River WMA (Between I15 and West Bernardo Dr., south of Ed Brown Center)	Must be triggered	Continuous-Ongoing	X	X	X	X	X	X		Open Space Area	T&SW with PWD

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-MUTA-12	Optional Must be Triggered	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. 9 potential canyon sites, owned by the City of San Diego or CSD Open Space Parks, have been identified in San Dieguito WMA that provide up to 1,406 acres of available space (1,885 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, and 3) staff resources are identified and 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.	San Dieguito River WMA	Must be triggered	Continuous-Ongoing	X	X	X	X	X	X		Open Space Area	T&SW with PWD

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-MUTA-13	Optional Must be Triggered	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. 8 potential canyon sites, owned by City of San Diego, have been identified in Los Peñasquitos WMA that provide up to 60 acres of available space (out of 174 acres of 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, and 3) staff resources are identified and 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.	Los Peñasquitos WMA	Must be triggered	Continuous-Ongoing	X	X	X	X	X	X		Open Space Area	T&SW with PWD

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-MUTA-14	Optional Must be Triggered	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. Twenty potential canyon sites, owned by City of San Diego, have been identified in Mission Bay WMA (Scripps and Tecolote Creek) that provide up to 143 acres of available space (773 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.	Mission Bay WMA	Must be triggered	Continuous-Ongoing	X	X	X	X	X	X		Open Space Area	T&SW with PWD

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-MUTA-15	Optional Must be Triggered	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.	Chollas Watershed	Must be triggered	Continuous-Ongoing	X	X	X	X	X	X		Open Space Area	T&SW with PWD

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
Stream, Channel and Habitat Rehabilitation Projects (B.3.b.(1)(b)(iii))															
CSD-MUTA-16	Optional Needed	El Cuervo del Norte Wetlands	In the Los Peñasquitos Creek Subwatershed, the El Cuervo Norte wetlands were built upon 23.3 acres upstream of the long-term MLS monitoring station. Flows from Los Peñasquitos Creek are diverted into the wetlands, creating the potential for solids to settle out and thus reduce the TSS measured at the MLS. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Los Peñasquitos Creek Subwatershed (Los Peñasquitos WMA)	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Residential Areas, Municipal Areas, Open Space Areas	T&SW with PWD
CSD-MUTA-17	Optional Needed	El Cuervo del Sur Wetlands	In the Los Peñasquitos Creek Subwatershed, on a total of 2.3 acres, the primary mitigation strategy in this plan involve the minor grading (one to three feet) of the Site to create three riparian plant zones. Maintenance activities planned during the maintenance and monitoring program revolve around the establishment of the plantings to a self-sufficient state. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Los Peñasquitos Creek Subwatershed (Los Peñasquitos WMA)	FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Residential Areas, Municipal Areas, Open Space Areas	T&SW with PWD

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-MUTA-18	Optional Must be Triggered	Day lighting Cudahy Creek.	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, 4) permits required by regulatory agencies are secured, and 5) consensus and community support has been achieved. 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.	Mission Bay WMA (East side of Mission Bay Parkbetween the Park and Clairemont)	Must be triggered	Continuous-Ongoing	X	X	X	X	X	X	X	Commercial Areas, Industrial Areas	TBD

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-MUTA-19	Optional Must be Triggered	Restoration of the riparian corridor under Genesee Avenue Bridge.	Restore more natural flow regimes, wetlands, and riparian corridors. 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, 4) permits required by regulatory agencies are secured, and 5) consensus and community support has been achieved. 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.	Mission Bay WMA (Rose Canyon)	Must be triggered	Continuous-Ongoing	X	X	X	X	X	X	X	Commercial Areas, Industrial Areas, Open Space Areas	TBD

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-MUTA-20	Optional Must be Triggered	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.	Areas identified during feasibility studies	Must be triggered	Continuous-Ongoing	X	X	X	X	X	X	X	Residential Areas, Municipal Areas, Publicly Owned Parks, Open Space Areas	T&SW

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
Water Quality Improvement BMPs															
Priority Development Projects (PDPs)															
CSD-PDP-01	Optional Needed	Priority Development Project BMPs in Los Peñasquitos WMA.	Per the Storm Water Standards Manual, all non-exempt public PDPs are subject to requirements to construct and maintain permanent BMPs. See WQIP Annual Report for updated PDP BMP Inventory. Funding and resources have been secured for PDPs implemented prior to FY16. Funding for PDP BMPs constructed in future fiscal years is contingent on annual budget approval by City Council.	Los Peñasquitos WMA	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X		Publicly Owned Parks, Residential, Commercial, and Municipal Areas	T&SW with PWD
CSD-PDP-02	Optional Needed	Priority Development Project BMPs in Mission Bay WMA.	Per the Storm Water Standards Manual, all non-exempt public PDPs are subject to requirements to construct and maintain permanent BMPs. See WQIP Annual Report for updated PDP BMP Inventory. Funding and resources have been secured for PDPs implemented prior to FY16. Funding for PDP BMPs constructed in future fiscal years is contingent on annual budget approval by City Council.	Mission Bay WMA	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X		Golf Course, Publicly Owned Park, Open Space Area, Residential Area	T&SW with PWD
CSD-PDP-03	Optional Needed	Priority Development Project BMPs in San Diego Bay WMA.	Per the Storm Water Standards Manual, all non-exempt public PDPs are subject to requirements to construct and maintain permanent BMPs. See WQIP Annual Report for updated PDP BMP Inventory. Funding and resources have been secured for PDPs implemented prior to FY16. Funding for PDP BMPs constructed in future fiscal years is contingent on annual budget approval by City Council.	San Diego Bay WMA	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X		Street, Roads, Publicly Owned Parks, Commercial, Residential, Industrial, and Municipal Areas	T&SW with PWD, County of San Diego
CSD-PDP-04	Optional Needed	Priority Development Project BMPs in San Diego River WMA.	Per the Storm Water Standards Manual, all non-exempt public PDPs are subject to requirements to construct and maintain permanent BMPs. See WQIP Annual Report for updated PDP BMP Inventory. Funding and resources have been secured for PDPs implemented prior to FY16. Funding for PDP BMPs constructed in future fiscal years is contingent on annual budget approval by City Council.	San Diego River WMA	Prior to FY16, FY17	Continuous-Ongoing	X	X	X	X	X	X		Residential and Commercial Areas, Municipal Areas, Publicly Owned Parks, Open Space Areas	T&SW with PWD

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-PDP-05	Optional Needed	Priority Development Project BMPs in San Dieguito River WMA.	Per the Storm Water Standards Manual, all non-exempt public PDPs are subject to requirements to construct and maintain permanent BMPs. See WQIP Annual Report for updated PDP BMP Inventory. Funding and resources have been secured for PDPs implemented prior to FY16. Funding for PDP BMPs constructed in future fiscal years is contingent on annual budget approval by City Council.	San Dieguito River WMA	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X		Publicly Owned Park, Open Space Area, Residential Area, Streets, Roads	T&SW with PWD
CSD-PDP-06	Optional Needed	Priority Development Project BMPs in Tijuana River WMA.	Per the Storm Water Standards Manual, all non-exempt public PDPs are subject to requirements to construct and maintain permanent BMPs. See WQIP Annual Report for updated PDP BMP Inventory. Funding and resources have been secured for PDPs implemented prior to FY16. Funding for PDP BMPs constructed in future fiscal years is contingent on annual budget approval by City Council.	Tijuana River WMA	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X		Commercial and Municipal Areas, Roads, Streets	T&SW with PWD
Proprietary BMPs															
CSD-WQBMP-01	Optional Needed	Rehco Rd.	In the Carroll Canyon Creek Subwatershed, an HSU unit is used to treat onsite runoff on the north end of Rehco Road. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	Carroll Canyon Creek Subwatershed (Los Peñasquitos WMA)	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X		Streets, Roads, Residential Area	T&SW with PWD
CSD-WQBMP-02	Optional Needed	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).	Chollas (Along S 43rd street between Logan Avenue and Keeler Avenue)	FY14	Continuous-Ongoing	X	X	X	X	X	X		Street, Roads, Commercial Area, Residential Area	T&SW with PWD
CSD-WQBMP-03	Optional Needed	Park Ridge hydrodynamic separator	A hydrodynamic separator used to treat onsite runoff of 37.6 acres. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council.	San Diego River WMA	FY17	Continuous-Ongoing	X	X	X	X	X	X		Residential Areas, Commercial Areas	T&SW with PWD

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
Dry Weather Flow Separation and Treatment Projects															
CSD-WQBMP-04	Optional Needed	Dry-weather flow diversion	A dry-weather flow diversion is constructed near 7920 Princess St. Funding and resources were secured for FY2014. Funding for future fiscal years is contingent on annual budget approval by City Council.	Mission Bay WMA (Scripps)	2014	Continuous-Ongoing	X	X	X	X	X	X		Residential Areas	T&SW with PWD
CSD-WQBMP-05	Optional Needed	Dry-weather flow diversion	A dry-weather flow diversion is constructed near 1624 Torrey Pines Rd. Funding and resources were secured for FY2014. Funding for future fiscal years is contingent on annual budget approval by City Council.	Mission Bay WMA (Scripps)	2014	Continuous-Ongoing	X	X	X	X	X	X		Residential Areas	T&SW with PWD
CSD-WQBMP-06	Optional Needed	Dry-weather flow diversion	A dry-weather flow diversion is constructed near Torrey Pines Rd & Charlot. Funding and resources were secured for FY2014. Funding for future fiscal years is contingent on annual budget approval by City Council.	Mission Bay WMA (Scripps)	2014	Continuous-Ongoing	X	X	X	X	X	X		Residential Areas	T&SW with PWD
CSD-WQBMP-07	Optional Needed	Dry-weather flow diversion	A dry-weather flow diversion is constructed near Camino del Oro & El Paseo. Funding and resources were secured for FY2014. Funding for future fiscal years is contingent on annual budget approval by City Council.	Mission Bay WMA (Scripps)	2014	Continuous-Ongoing	X	X	X	X	X	X		Residential Areas	T&SW with PWD
CSD-WQBMP-08	Optional Needed	Dry-weather flow diversion	A dry-weather flow diversion is replaced near Avenida De La Playa. Funding and resources were secured for FY2015. Funding for future fiscal years is contingent on annual budget approval by City Council.	Mission Bay WMA (Scripps)	2015	Continuous-Ongoing	X	X	X	X	X	X		Residential Areas	T&SW with PWD

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
CSD-WQBMP-09	Optional Must be Triggered	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.	Downstream reaches where persistent dry weather flows have been observed	Must be triggered	Continuous-Ongoing	X	X	X	X	X	X		Variable	T&SW with PWD

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
Trash Segregation															
CSD-WQBMP-10	Optional Must be Triggered	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.	High-loading areas city-wide	Must be triggered	Continuous-Ongoing	X		X	X			X	Waste Disposal	T&SW with PWD

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
Additional Opportunities															
CSD-AddOp-01	Optional Needed	Participate in restorative efforts for the Los Peñasquitos Lagoon in collaboration with TMDL Responsible Parties and other stakeholders.	Collaborate with TMDL Responsible Parties and other stakeholders to promote and support the restoration of the Los Peñasquitos Lagoon. Efforts will be coordinated with the Lagoon Enhancement Program currently being updated by the Los Peñasquitos Lagoon Foundation. This effort will require that 1) funding to address MS4 discharges is identified and secured, 2) staff resources are identified and secured, 3) partners are identified and formal MOUs are developed and executed, 4) permits required by regulatory agencies are secured, and 5) consensus and community support are achieved. 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.	Los Peñasquitos Lagoon Subwatershed (Los Peñasquitos WMA)	FY20	Continuous-Ongoing	X	X	X	X	X	X	X	Variable, Hydromodification	T&SW with TMDL Responsible Parties and Los Peñasquitos WMA stakeholders
CSD-AddOp-02	Optional Needed	Through adaptive management and additional analysis in the future, the City will identify and implement one or more of the following opportunities to meet numeric goals: 1) MS4 outfall repair and relocation, 2) slope stabilization, 3) stream restoration, 4) implementation of sediment detention basins upstream of Los Peñasquitos Lagoon or 5) new strategies not yet identified.	Through adaptive management and additional analysis in the future, the City will identify and implement one or more of the following opportunities to meet numeric goals: 1) MS4 outfall repair and relocation, 2) slope stabilization, 3) stream restoration, 4) implementation of sediment detention basins upstream of Los Peñasquitos Lagoon or 5) new strategies not yet identified. 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.	Los Peñasquitos WMA	FY28	Continuous-Ongoing	X	X	X	X	X	X	X	Variable, Hydromodification	T&SW

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
WMA Strategies (Optional Strategies, B.3.b.(2))															
WMA-1	Optional Needed	Watershed Collaboration for Los Peñasquitos Lagoon Restoration	Collaborate with stakeholders to promote the restoration of salt marsh areas and overall improvements in estuarine and other beneficial uses within the Los Peñasquitos Lagoon. Benefits of this strategy include more efficient targeting and prioritization of lagoon restoration activities, increased cost-effectiveness of selected BMP strategies in the watershed, and development of partnerships across the MS4 jurisdictions and other TMDL responsible parties. These efforts will be coordinated with the Lagoon Enhancement Program currently being updated by the Los Peñasquitos Lagoon Foundation and will require that (1) funding to address MS4 discharges and dry weather input of freshwater is identified and secured, (2) staff resources are identified and secured, (3) partners are identified and formal memoranda of understanding (MOUs) are developed and executed, (4) permits required by regulatory agencies are secured, and (5) consensus and community support are 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. Implementation is in perpetuity as long as funding is available.	Los Peñasquitos Lagoon Subwatershed (Los Peñasquitos WMA)	FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Land Development, Hydromodification	T&SW, WMA Copermittees

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
WMA-2	Optional Needed	Los Peñasquitos Wetland Restoration Project	Collaborate with Copermittees on the region-wide North Coast Corridor (NCC) Program, led by Caltrans and SANDAG. The program is intended to improve coastal transportation (including Interstate 5 and the coastal rail and transit system) while protecting and restoring coastal habitats throughout the corridor. The 27-mile-long project stretches across the cities of Oceanside, Carlsbad, Encinitas, Solana Beach, Del Mar, and San Diego and provides improvements for six coastal lagoons, including Los Peñasquitos Lagoon. The NCC Program is implementing construction in phases from 2010 through 2040. The program is a $6.5-billion investment in the region that will be paid for through a combination of federal, state, and local funds. The NCC program is part of TransNet, the voter-approved, half-cent sales tax initiative that helps fund transportation projects in the region.	Los Peñasquitos WMA	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Roads, Streets, Highways, and Parking; Land Development; Hydromodification	T&SW, Copermittees, SANDAG, TransNet
WMA-3	Optional Needed	San Dieguito Wetland Restoration Project	The Cities of San Diego and Del Mar are collaborating organizers of the San Dieguito River Park (SDRP) to restore the San Dieguito coastal wetlands and lagoon system. The 150-acre wetland restoration work has been primarily accomplished by Southern California Edison (SCE) and partner owners of the San Onofre Nuclear Generating Station (SONGS), including San Diego Gas & Electric (SDG&E), City of Riverside, and City of Anaheim. Construction began in fall 2006 and the $90-million Restoration Project was officially dedicated in 2011. The Restoration Project has enhanced southern California's unique coastal and marine environment as the restoration has provided adequate tidal flushing and circulation to support biologically diverse habitats. Beyond protecting endangered species and providing habitat to hundreds of bird species and fish, the restoration project has also added a coastal segment to the Coast to Crest Trail, allowing public enjoyment of the wetlands area while protecting sensitive habitat and vegetation. Funding for monitoring and managing the wetlands is ongoing.	San Dieguito River WMA	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Variable	T&SW, City of Del Mar, SCE, SDG&E, SONGS

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
WMA-4	Optional Needed	Collaborative Approach to Irrigation Reduction	Responsible Agencies are collaborating with water agencies to encourage implementation of water conservation efforts. Water conservation that attempts to reduce irrigation and minimize storm water runoff can also improve water quality of receiving waterbodies. MWD's SoCal Water$mart Program supports conservation efforts by offering incentives in the form of rebates for rain barrels, rotating sprinkler nozzles, weather-based irrigation controllers, soil moisture sensor systems, and turf replacement. Funding and resources have been secured for FY2016. Funding for future fiscal years is contingent on annual budget approval by City Council or appropriate legislative body (i.e. the Board).	City-wide (except Chollas Watershed and San Diego River WMA)	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Residential Areas	City of San Diego T&SW with PWD, WMA Copermittees, MWD, SDCWA
WMA-5	Optional Needed	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.	City-wide (Chollas Watershed specific)	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Variable	T&SW, WMA Copermittees

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
WMA-6	Optional Needed	Offsite Alternative Compliance Option	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, which was submitted and approved in FY 2016. Following this approval, jurisdictions can formally implement an optional Alternative Compliance Program by February 2016 (time coincident with implementation of standards set forth in the regional BMP Design Manual and local Storm Water Standards Manuals).	City-wide	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Variable	T&SW, Regional Copermittees
WMA-7	Optional Needed	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 Ag Waiver, 2) enforcement of other non-MS4 dischargers, and 3) bacteria TMDL updates. 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.	City-wide (San Dieguito River WMA specific)	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Variable	T&SW, All WMA Copermittees

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
WMA-8	Optional Needed	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, 2) enforcement of other non-MS4 dischargers, and 3) Bacteria TMDL updates. 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.	City-wide (Los Penasquitos WMA specific)	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Variable	T&SW, WMA Copermittees
WMA-9	Optional Needed	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 other non-MS4 dischargers and 2) Bacteria TMDL updates. 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.	City-wide (Mission Bay and San Diego River WMA specific)	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Variable	T&SW, WMA Copermittees
WMA-10	Optional Needed	Collaboration with the Regional Board.	The RAs will work with the Regional Board to identify solutions and address sources of potential water quality impairments within the Tijuana River WMA. 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 Ag Waiver, 2) enforcement of other non-MS4 dischargers, and 3) bacteria TMDL updates. 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.	City-wide (Tijuana River WMA specific)	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Variable	T&SW, All WMA Copermittees

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
WMA-11	Optional Needed	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.	Chollas Creek	Prior to FY16	Continuous-Ongoing			X					N/A	TMDL RPs, Regional Board
WMA-12	Optional Needed	Refinement of Water Quality Regulations	The Responsible Agencies will collaborate with the Regional Board to refine the accuracy of regulations to ensure that Non-MS4 dischargers are regulated appropriately. The goal of this exercise is to begin a dialog with the Regional Board that may lead to the following outcomes: 1) Removal of Non-MS4 discharges and the associated BMPs needed to treat those discharges from the Responsible Agencies' burden, 2) amendment of current TMDLs and the MS4 Permit to correctly assign responsibilities for Non-MS4 discharges to the appropriate entities, and 3) strengthening of Non-MS4 NPDES permits that are directly tied to the requirements of existing and future TMDLs. 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. Resources to implement this strategy include staff time and are currently secured.	Los Penasquitos, Mission Bay, and San Diego River WMAs	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Variable	T&SW, WMA Copermittees

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
WMA-13	Optional Must be Triggered	Participation in Watershed Council	If a Watershed Council is re-established, the City of San Diego, County of San Diego and potentially other Responsible Agencies will participate. Watershed Councils are typically locally organized, voluntary, non-governmental organizations, and are intended to broadly represent various stakeholders in the WMA. Goals of Watershed Councils may vary, but they generally promote protecting the watershed and sustaining natural resources. This coordination could assist in selecting WMA projects, identifying potential funding opportunities, and promoting communication among community groups and regulated agencies. Resources necessary to implement this strategy include participating jurisdictional staff to coordinate with the regional effort and the development of an agreement (e.g. MOU, JPA) among participating entities, which may take up to one year to coordinate. Projected funding needs may be met through grant funding, support from community groups or other institutions, or jurisdictional General Funds. General Funds are contingent on approval of the annual budget by City Council or appropriate legislative body. Participation is dependent on funding availability and continued benefit to watershed.	San Dieguito River WMA	Must be triggered	Continuous-Ongoing	X	X	X	X	X	X	X	Variable	T&SW, WMA Copermittees

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							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
WMA-14	Optional Needed	Participation in San Diego Integrated Regional Water Management Program.	The City of San Diego, County of San Diego, and San Diego County Water Authority form the Regional Water Management Group (RWMG) and administer and implement the San Diego IRWM Program. The Regional Advisory Committee (RAC) includes rotating members from various functional areas related to water management. In San Dieguito River WMA, two integrated projects, funded through Proposition 50 and 84, target water quality in Lake Hodges: 1) San Dieguito Watershed Management Plan Implementation – Lake Hodges Natural Treatment System Conceptual Design and 2) Lake Hodges Water Quality and Quagga Mitigation Measures. Along with grant funding, the City of San Diego Public Utilities Department, City of Escondido, San Dieguito River Valley Conservancy, Santa Fe Irrigation District, and the San Diego County Water Authority are providing local match or in-kind services. All General Funds are secured on an annual basis and are contingent upon annual budget approval by each participating Responsible Agency.	San Dieguito River WMA	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Variable	City of San Diego PUD, County of San Diego, San Diego Water Authority
WMA-15	Optional Needed	Collaboration with Federal, State and Local Agencies	RAs will work collaboratively to implement projects within the WMA that improve water quality. These collaborations include working with the following: U.S. IBWC, Binational Task Force; U.S EPA Border 2020; Good Neighbor Environmental Board (GNEB); and, TRNERR advisory council Resources necessary to implement this strategy includes participating jurisdictional staff, funding, support from international/community groups, other institutions, or jurisdictional General Funds. Participation is dependent on funding availability. Funding and resources have been secured for FY16. Funding for future fiscal years is contingent on annual budget approval by each Responsible Agency.	Tijuana River WMA	Prior to FY16	Continuous-Ongoing	X	X	X	X	X	X	X	Variable	T&SW, Copermittees, Federal, State, and Local Agencies

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
WMA-16	Optional Must be Triggered	Tijuana River Valley Recovery Team (TRVRT) Project Tier I Strategy: Reclamation of the Nelson Sloan Quarry	The City of San Diego, in collaboration with the County of San Diego, will partner together to reclaim the Nelson Sloan Quarry using sediment excavated in the Tijuana River Valley; a viable alternative to current sediment management transport and disposal practices. Resources necessary to implement this strategy includes participating jurisdictional staff, development of a maintenance and operation plan, development of preliminary design plans, CEQA review, and development of final construction documents. Project funding needs may be met through grant funding (e.g. California Coastal Conservancy), support from international/community groups, other institutions, or jurisdictional General Funds. General funds are contingent on approval of the annual budget by City Council or appropriate legislative body (e.g. the Board). Participation is dependent on funding availability. Once these steps have been completed, additional funding and other logistical support will be needed to construct the site for sediment deposition, management, and operation. The Regional Board, with support from the Responsible Agencies and the other TRVRT members, submitted a $500,000 request to the State Board for Cleanup and Abatement Account (CAA) activities.	Tijuana River WMA	Must be triggered	Continuous-Ongoing					X			Variable	T&SW, Copermittees,TRVRT

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
WMA-17	Optional Must be Triggered	Tijuana River Valley Recovery Team (TRVRT) Project Tier I Strategy: Brown Property Restoration	Historic placement of unauthorized fill has resulted in significant impacts to the hydrologic function of the Tijuana River. Removal of the unauthorized fill and restoration of the site to riparian forest floodplain at the Brown Property on Hollister Avenue would substantially improve the hydrology of the Tijuana River Valley and reduce flooding risk. Resources necessary to implement this strategy includes a focused hydrology study, CEQA review and permitting of the fill removal and restoration to ensure impacts are mitigated and an appropriate, sustainable, post-project design is developed for the restoration of the site, and funding; through grants, or jurisdictional General Funds. General funds are contingent on approval of the annual budget by City Council or appropriate legislative body (e.g. the Board). Participation is dependent on funding availability. Additional planning activities are needed to secure funding, prepare a hydrology study, prepare a feasibility study, develop preliminary design plans, perform a CEQA review, and develop final construction documents. Once these steps are complete, additional resources will be needed to begin fill removal and other restoration work, and manage the restored property. The Regional Board has requested $300,000 to prepare a hydrology study, feasibility study, and environmental documents. The City of San Diego, with support from the other Tijuana River WMA Responsible Agencies and other TRVRT members, is working with the US Army Corps of Engineers to develop a scope of work for a hydrology study. This process is estimated to be 24-36 months.	Tijuana River WMA	Must be triggered	Continuous-Ongoing	X	X	X	X	X	X	X	Variable	T&SW, Copermittees,TRVRT

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
WMA-18	Optional Must be Triggered	Tijuana River Valley Recovery Team (TRVRT) Project Tier I Strategy: Preparation of a Sediment Management Plan for the Tijuana River Valley	The City of San Diego, County of San Diego, and California State Parks, in collaboration with NGOs, will partner together to continue excavating sediment and trash in several locations throughout the Tijuana River Valley. Sediment disposal is currently conducted at landfills at a cost of approximately $100/ton. A number of sediment management options may be explored as part of a comprehensive sediment management plan including: reclamation of the Nelson Sloan quarry, beach replenishment, construction and other fill and potential cooperative agreements with Mexico for cost-efficient reuse. Resources necessary to implement this strategy includes participating jurisdictional staff. Project funding needs may be met through grant funding (e.g. California Coastal Conservancy), support from International/community groups, other institutions, or jurisdictional General Funds. General funds are contingent on approval of the annual budget by City Council or appropriate legislative body (e.g. the Board). Participation is dependent on funding availability. The Regional Board's CAA request included $300,000 to prepare the sediment management plan. This funding is needed to identify regulatory requirements, processing and costing options.	Tijuana River WMA	Must be triggered	Continuous-Ongoing				X	X			Variable	T&SW, Copermittees,TRVRT
WMA-19	Optional Must be Triggered	Tijuana River Valley Recovery Team (TRVRT) Project Tier I Strategy: Tijuana River Valley Recovery Team Mission Support	Dedicated administrative services, facilitation, translation, website enhancements, and mapping are needed to support the multi-agency needs of the Recovery Team. Project funding needs may be met through grant funding (e.g. California Coastal Conservancy), support from International/community groups, other institutions, or jurisdictional General Funds. Th Regional Board's CAA $300,000 request will fund contractor support for administration, facilitation, and translation needs for a period of two years.	Tijuana River WMA	Must be triggered	Continuous-Ongoing	X	X	X	X	X	X	X	Variable	T&SW, Copermittees,TRVRT

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
WMA-20	Optional Must be Triggered	Tijuana River Valley Recovery Team (TRVRT) Project Tier I Strategy: Targeted Sediment and Trash Removal Projects	The City of San Diego, County of San Diego, and Imperial Beach will continue to participate in various sediment and trash removal projects, both through financial and staff contributions. Resources necessary to implement this strategy includes NGO coordination, Volunteers and funding; through grants, or jurisdictional General Funds. General funds are contingent on approval of the annual budget by City Council or appropriate legislative body (e.g. the Board). Participation is dependent on funding availability. The Regional Board's CAA request included $150,000 to support additional cleanup activities. It is anticipated that this approach may provide synergy with other sediment and trash source control efforts and lead to long-term improvements to water quality.	Tijuana River WMA	Must be triggered	Continuous-Ongoing				X	X			Variable	T&SW, Copermittees,TRVRT
WMA-21	Optional Must be Triggered	Coordinate with Development Services Department to implement Sustainable Landscapes Program to encourage landscape retrofits.	Implementation of this strategy may be triggered if (1) an interim goal has not been met, (2) it has been determined though adaptive management that implementation is necessary, and (3) all of the resources have been identified and secured. The following resources must be secured for each fiscal year that this program is implemented: (1) Partners must be identified and each partner must agree to terms of partnership, (2) funding must be identified and secured by each of the partners for their portion of the overall cost, (3) staff resources must be identified and secured, (4) the scope of the program (target location(s), type and value of incentives, etc.) must be identified, and (5) consensus and community support has been achieved.	San Diego River WMA	Must be triggered	Continuous-Ongoing	X	X	X		X			Commercial, Industrial, Municipal, and Residential Areas; Irrigation Runoff	T&SW with DPW, San Diego River Copermittees

ID	Strategy Type	Strategy	Implementation Approach	Location	Implementation or Construction Year	Implementation Schedule	Pollutants Addressed							Source	Responsible City Department and Other Collaborating Departments or Agencies
							Bacteria	Nutrients	Metals	Trash	Sediment	Flow	Habitat/Wildlife		
WMA-22	Optional Must be Triggered	Implement wastewater management program to prevent sanitary sewer overflows.	Develop and print guidance materials that address septic system maintenance and Fats, Oils, and Grease (FOG) management. Conduct workshops, training sessions, and other media outreach. This effort will require community support and partnerships to be established. Resources and funding include Grant funding from Proposition 1. Implementation of this strategy may be triggered if (1) an interim goal has not been met, (2) it has been determined though adaptive management that implementation is necessary, and (3) all of the resources have been identified and secured. The following resources must be secured for each fiscal year that this program is implemented: (1) Partners must be identified and each partner must agree to terms of partnership, (2) funding must be identified and secured by each of the partners for their portion of the overall cost, (3) staff resources must be identified and secured, (4) the scope of the program (target location(s), type and value of incentives, etc.) must be identified, and (5) consensus and community support has been achieved.	San Diego River WMA	Must be triggered	Completed within schedule	X	X						Sewer Infrastructure	T&SW with PUD, San Diego River Copermittees

DSD= Development Services Department; PUD = Public Utilities Department; PWD = Public Works Department; T&SW = Transportation and Storm Water Division; WAMP = Watershed Asset Management Plan; TBD = will be determined during the next fiscal year.

Construction
Ongoing Implementation/ O&M
As needed/Design

Table 2. City of San Diego Annual Schedule through FY2035

ID	Location	Implementation or Construction Year	Implementation Schedule	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	FY 32	FY 33	FY 34	FY 35
Jurisdictional Strategies																								
E.3 Development Planning																								
All Development Projects																								
CSD-JRMP-01	City-wide	Prior to FY16	Continuous- Ongoing																					
CSD-JRMP-02	City-wide	FY14-FY15	Continuous- As needed																					
CSD-JRMP-03	City-wide	FY15	Continuous- As needed																					
CSD-JRMP-04*	City-wide	FY16	Continuous- As needed																					
CSD-JRMP-05*	City-wide	FY15	Continuous- As needed																					
CSD-JRMP-06	City-wide	Prior to FY16	Continuous- Ongoing																					
Priority Development Projects (PDPs)																								
CSD-JRMP-07	City-wide	FY16	Continuous- Ongoing																					
CSD-JRMP-08	City-wide	FY16	Continuous- Ongoing																					
CSD-JRMP-09	City-wide	FY15	Continuous every 5 years/ permit cycle																					
CSD-JRMP-10*	City-wide	FY15	Completed within schedule																					
CSD-JRMP-11*	City-wide	FY15	Completed within schedule																					
CSD-JRMP-12*	City-wide	FY15	Completed within schedule																					
CSD-JRMP-13*	City-wide	FY15	Completed within schedule																					
CSD-JRMP-14*	City-wide	FY15	Continuous- Ongoing																					
E.4 Construction Management																								
CSD-JRMP-15	City-wide	FY16	Continuous- Ongoing																					

ID	Location	Implementation or Construction Year	Implementation Schedule	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	FY 32	FY 33	FY 34	FY 35
CSD-JRMP-16	City-wide (Mission Bay - Scripps ASBS specific)	FY16	Continuous- Ongoing																					
E.5 Existing Development																								
Commercial, Industrial, Municipal, and Residential Facilities and Areas																								
CSD-JRMP-17	City-wide	FY16	Continuous- Ongoing																					
CSD-JRMP-18	City-wide	FY15	Continuous every 5 years/ permit cycle																					
CSD-JRMP-19	City-wide Residential, commercial and industrial areas	FY15	Continuous- Ongoing																					
CSD-JRMP-20	City-wide	Prior to FY16	Continuous- Ongoing																					
CSD-JRMP-21	City-wide	FY15	Continuous- As needed																					
CSD-JRMP-22*	City-wide Residential and Commercial Areas	Prior to FY16	Continuous- Ongoing																					
MS4 Infrastructure																								
CSD-JRMP-23	City-wide	FY16	Continuous- Ongoing																					
CSD-JRMP-24*	Los Peñasquitos WMA and Chollas Watershed	FY16	Continuous- Ongoing																					
CSD-JRMP-25*	Tijuana River WMA	FY16	Continuous- Ongoing																					
CSD-JRMP-27	Los Peñasquitos and Tijuana River WMAs, Chollas Watershed	FY13	Completed within schedule in 5 years (ends FY18)																					
CSD-JRMP-28	City-wide	FY16	Continuous- Ongoing																					
CSD-JRMP-29	City-wide	FY16	Continuous- Ongoing																					
CSD-JRMP-30	City-wide	FY16	Continuous- Ongoing																					
CSD-JRMP-31*	City-wide	FY16	Continuous- As needed																					
Roads, Streets, and Parking Lots																								
CSD-JRMP-32	City-wide	FY16	Continuous- Ongoing																					
CSD-JRMP-33	Los Peñasquitos WMA and Chollas Watershed	FY16	Continuous- As needed																					
CSD-JRMP-34*	Los Peñasquitos WMA and Chollas Watershed	FY17	Continuous- Ongoing																					
CSD-JRMP-35*	City-wide except San Diego River WMA	FY17	Continuous- Ongoing																					
Pesticides, Herbicides, and Fertilizer BMP Program																								

ID	Location	Implementation or Construction Year	Implementation Schedule	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	FY 32	FY 33	FY 34	FY 35
CSD-JRMP-37	City-wide	FY16	Continuous- Ongoing																					
Retrofit and Rehabilitation in Areas of Existing Development																								
CSD-JRMP-38	City-wide	FY18	Continuous- Ongoing																					
CSD-JRMP-39	City-wide	FY18	Continuous- Ongoing																					
E.2 Illicit Discharge, Detection, and Elimination (IDDE) Program																								
CSD-JRMP-40	City-wide	Prior to FY16	Continuous- Ongoing																					
CSD-JRMP-41	City-wide (Mission Bay - Scripps ASBS specific)	Prior to FY16	Continuous- Ongoing																					
E.7 Public Education and Participation (B.3.b(1)(a)(iii))																								
CSD-JRMP-42	City-wide	Prior to FY16	Continuous- Ongoing																					
CSD-JRMP-43	City-wide	Prior to FY16	Continuous- Ongoing																					
CSD-JRMP-44	City-wide Non-residential Areas	Prior to FY16	Continuous- Ongoing																					
CSD-JRMP-45*	City-wide	FY16	Continuous- Ongoing																					
CSD-JRMP-46*	City-wide	FY16	Continuous- Ongoing																					
CSD-JRMP-47	Los Peñasquitos and San Dieguito River WMAs	FY16	Continuous- Ongoing																					
CSD-JRMP-48	City-wide	FY15	Continuous- Ongoing																					
CSD-JRMP-49	City-wide	Prior to FY16	Continuous- Ongoing																					
CSD-JRMP-50*	City-wide	FY16	Continuous- Ongoing																					
CSD-JRMP-51*	City-wide	FY16	Continuous- Ongoing																					
CSD-JRMP-52	City-wide	Prior to FY16	Continuous- Ongoing																					
CSD-JRMP-53*	City-wide	Prior to FY16	Continuous- Ongoing																					
E.6 Enforcement Response Plan																								
CSD-JRMP-54	City-wide	Prior to FY16	Continuous- Ongoing																					
CSD-JRMP-55*	City-wide	FY16	Continuous- Ongoing																					
CSD-JRMP-56*	City-wide	FY16	Continuous- Ongoing																					

ID	Location	Implementation or Construction Year	Implementation Schedule	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	FY 32	FY 33	FY 34	FY 35
CSD-JRMP-57*	City-wide	FY16	Continuous- As needed																					
CSD-JRMP-58*	City-wide	FY16	Continuous- Ongoing																					
CSD-JRMP-59*	City-wide	FY16	Continuous- Ongoing																					
CSD-JRMP-60*	City-wide	FY16	Continuous- Ongoing																					
Non-JRMP Strategies (Optional Strategies, B.3.b(1)(b))																								
Nonstructural Strategies																								
CSD-NS-01	Los Peñasquitos WMA	FY16	One time																					
CSD-NS-02	City-wide	Prior to FY16	Continuous- As needed																					
CSD-NS-03	City-wide	FY16	Continuous- As needed																					
CSD-NS-04	City-wide	FY15	Completed within schedule																					
CSD-NS-05	City-wide	Must be triggered	Continuous as funding allows	If triggered, begin planning, acquiring funding and resources																				
CSD-NS-06	City-wide Residential Areas	Prior to FY16	Continuous- Ongoing																					
CSD-NS-07	City-wide Residential and Commercial Areas	Prior to FY16	Continuous- Ongoing																					
CSD-NS-08	City-wide Residential and Commercial Areas	FY16	Continuous- Ongoing																					
CSD-NS-09	City-wide Residential Areas	Prior to FY16	Continuous- Ongoing																					
CSD-NS-10	City-wide Residential and Commercial Areas	Prior to FY16	Continuous- Ongoing																					
CSD-NS-11	City-wide	FY16	Continuous- Ongoing																					
CSD-NS-12	Mission Bay WMA (Rose Canyon)	Must be triggered	Continuous if effective and as funding allows	If triggered, begin planning, acquiring funding and resources																				
CSD-NS-13	Otay River HU (San Diego Bay WMA)	Prior to FY16	Continuous- Ongoing																					
CSD-NS-14	Tijuana River WMA	Must be triggered	Continuous if effective and as funding allows	If triggered, begin planning, acquiring funding and resources																				
CSD-NS-15	Mission Bay WMA	FY16	Continuous- Ongoing																					
CSD-NS-16	City-wide	FY15	Completed within schedule																					
CSD-NS-17	City-wide	FY16	Continuous- Ongoing																					
CSD-NS-18	City-wide	Prior to FY16	Continuous- Ongoing																					

ID	Location	Implementation or Construction Year	Implementation Schedule	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	FY 32	FY 33	FY 34	FY 35
CSD-NS-19	City-wide	FY18	Continuous- Ongoing				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
CSD-NS-20	Chollas Watershed	Must be triggered	Continuous if effective and as funding allows	If triggered, begin planning, acquiring funding and resources																				
CSD-NS-21	Chollas Watershed	Must be triggered	Continuous if effective and as funding allows	If triggered, begin planning, acquiring funding and resources																				
CSD-NS-22	City-wide	FY16	Continuous- Ongoing		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
CSD-NS-23	City-wide	FY16	Continuous- Ongoing		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
CSD-NS-24	Tijuana River WMA	FY16	One time		■																			
CSD-NS-25	Los Peñasquitos WMA	FY16	One time		■																			
CSD-NS-26	Region-wide	Prior to FY16	Completed within schedule	■																				
CSD-NS-27	Region-wide (Los Peñasquitos, San Dieguito River, Mission Bay, and San Diego River WMAs)	Prior to FY16	One time	■																				
CSD-NS-28	Mission Bay WMA (Tecolote Creek)	FY16	One time		■																			
CSD-NS-29	San Dieguito River WMA	FY16	One time		■																			
CSD-NS-30	San Dieguito River WMA	FY17	Completed within schedule in 2 yrs.			■	■																	
CSD-NS-31	Los Peñasquitos, San Dieguito River, and Mission Bay WMAs	FY16	Continuous- Ongoing		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
CSD-NS-32	City-wide	FY16	Completed within schedule		■																			
CSD-NS-33	City-wide	Must be triggered	Completed within schedule	If triggered, begin planning, acquiring funding and resources																				
CSD-NS-34	City-wide	Must be triggered	Continuous as funding allows	If triggered, begin planning, acquiring funding and resources																				
CSD-NS-35	San Dieguito River WMA above Lake Hodges and Tijuana River WMA	Must be triggered	Continuous as funding allows	If triggered, begin planning, acquiring funding and resources																				
CSD-NS-36	San Dieguito River WMA	Must be triggered	Continuous as funding allows	If triggered, begin planning, acquiring funding and resources																				
CSD-NS-37	City-wide	Must be triggered	Completed within schedule	If triggered, begin planning, acquiring funding and resources																				
CSD-NS-38	City-wide	Must be triggered	Completed within schedule	If triggered, begin planning, acquiring funding and resources																				
CSD-NS-39	City-wide	Must be triggered	Continuous as funding allows	If triggered, begin planning, acquiring funding and resources																				
CSD-NS-40	Mission Bay WMA	Must be triggered	Continuous as funding allows	If triggered, begin planning, acquiring funding and resources																				
CSD-NS-41	Mission Bay WMA	Must be triggered	Continuous as funding allows	If triggered, begin planning, acquiring funding and resources																				
CSD-NS-42	Mission Bay WMA (Rose Canyon)	Must be triggered	Continuous- Ongoing	If triggered, begin planning, acquiring funding and resources																				

ID	Location	Implementation or Construction Year	Implementation Schedule	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	FY 32	FY 33	FY 34	FY 35
CSD-NS-43	San Dieguito River WMA (Lake Hodges)	Must be triggered	Continuous as funding allows	If triggered, begin planning, acquiring funding and resources																				
CSD-NS-44	City-wide	Must be triggered	Continuous as funding allows	If triggered, begin planning, acquiring funding and resources																				
CSD-NS-45	Mission Bay WMA	Must be triggered	Continuous as funding allows	If triggered, begin planning, acquiring funding and resources																				
CSD-NS-46	Mission Bay WMA	Must be triggered	Continuous as funding allows	If triggered, begin planning, acquiring funding and resources																				
CSD-NS-47	City-wide	Prior to FY16	Continuous- Ongoing																					
CSD-NS-48	Los Peñasquitos WMA	Must be triggered	Continuous as funding allows	If triggered, begin planning, acquiring funding and resources																				
CSD-NS-49	Los Peñasquitos WMA	Prior to FY16	Continuous- Ongoing																					
CSD-NS-50	San Dieguito River WMA	Prior to FY16	Continuous- Ongoing																					
CSD-NS-51	City-wide	Prior to FY16	Continuous- Ongoing																					
CSD-NS-52	Chollas Creek	Prior to FY16	Continuous- Ongoing																					
CSD-NS-53	Los Peñasquitos, Mission Bay, and San Diego River WMAs	Prior to FY16	Continuous- Ongoing																					
CSD-NS-54	Tijuana River WMA	Prior to FY16	Continuous- Ongoing																					
CSD-NS-55	Tijuana River WMA	Must be triggered	Continuous- Ongoing	If triggered, begin planning, acquiring funding and resources																				
CSD-NS-56	Tijuana River WMA	Must be triggered	Continuous- Ongoing	If triggered, begin planning, acquiring funding and resources																				
CSD-NS-57	Tijuana River WMA	Must be triggered	Continuous- Ongoing	If triggered, begin planning, acquiring funding and resources																				
CSD-NS-58	Tijuana River WMA	Must be triggered	Continuous- Ongoing	If triggered, begin planning, acquiring funding and resources																				
CSD-NS-59	Tijuana River WMA	Must be triggered	Continuous- Ongoing	If triggered, begin planning, acquiring funding and resources																				
CSD-NS-60	San Diego River WMA	Must be triggered	Continuous- Ongoing	If triggered, begin planning, acquiring funding and resources																				
CSD-NS-61	San Diego River WMA	Must be triggered	Completed within schedule	If triggered, begin planning, acquiring funding and resources																				
Structural Strategies																								
CSD-STRUCT-01	Sunset Cliffs Natural Park (San Diego Bay WMA)	FY22	Continuous- Ongoing																					
CSD-STRUCT-02	San Diego River WMA	FY16	Continuous- Ongoing																					
Green Infrastructure																								
CSD-GI-01	Mission Bay WMA (Scripps)	Prior to FY16	Continuous- Ongoing																					
CSD-GI-02	Mission Bay WMA (Tecolote Creek)	FY26	Continuous- Ongoing																					

ID	Location	Implementation or Construction Year	Implementation Schedule	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	FY 32	FY 33	FY 34	FY 35
CSD-GI-03	Carmel Valley Creek Subwatershed (Los Peñasquitos WMA)	FY22	Continuous- Ongoing																					
CSD-GI-04	Carroll Canyon Creek Subwatershed (Los Peñasquitos WMA)	FY26	Continuous- Ongoing																					
CSD-GI-05	Los Peñasquitos Creek Subwatershed (Los Peñasquitos WMA)	FY26	Continuous- Ongoing																					
CSD-GI-06	Los Peñasquitos Lagoon Subwatershed (Los Peñasquitos WMA)	FY28	Continuous- Ongoing																					
CSD-GI-07	San Diego River WMA	FY16	Continuous- Ongoing																					
CSD-GI-08	San Diego River WMA	FY17	Continuous- Ongoing																					
CSD-GI-09	San Diego River WMA	FY22	Continuous- Ongoing																					
CSD-GI-10	Chollas Watershed	FY14	Continuous- Ongoing																					
CSD-GI-11	Chollas Watershed	Prior to FY16	Continuous- Ongoing																					
CSD-GI-12	Chollas Watershed	Prior to FY16	Continuous- Ongoing																					
CSD-GI-13	Chollas Watershed	Prior to FY16	Continuous- Ongoing																					
CSD-GI-14	San Diego River WMA	Prior to FY16	Continuous- Ongoing																					
CSD-GI-15	Prioritized public parcels in San Dieguito River and Tijuana River WMAs	Must be triggered	Continuous- Ongoing	If triggered, begin planning, acquiring funding and resources																				
CSD-GI-16	Chollas Watershed	FY18	Continuous- Ongoing																					
Green Streets																								
CSD-GS-01	Mission Bay WMA (Tecolote Creek)	Prior to FY16	Continuous- Ongoing																					
CSD-GS-02	Mission Bay WMA (Tecolote Creek)	2014	Continuous- Ongoing																					
CSD-GS-03	San Dieguito River WMA (Callado Rd and Pastoral St)	FY16	Completed within schedule in FY18																					
CSD-GS-04	Chollas Watershed	FY17	Continuous- Ongoing																					
CSD-GS-05	Carmel Valley Creek Subwatershed (Los Peñasquitos WMA)	FY26	Continuous- Ongoing																					
CSD-GS-06	Carroll Canyon Creek Subwatershed (Los Peñasquitos WMA)	FY26	Continuous- Ongoing																					
CSD-GS-07	Los Peñasquitos Creek Subwatershed (Los Peñasquitos WMA)	FY24	Continuous- Ongoing																					
CSD-GS-08	Los Peñasquitos Lagoon Subwatershed (Los Peñasquitos WMA)	FY26	Continuous- Ongoing																					
CSD-GS-09	Chollas Watershed	FY18	Continuous- Ongoing																					

ID	Location	Implementation or Construction Year	Implementation Schedule	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	FY 32	FY 33	FY 34	FY 35
CSD-GS-10	San Diego River WMA	FY24	Continuous- Ongoing																					
CSD-GS-11	San Dieguito River and Tijuana River WMAs	Must be triggered	Continuous- Ongoing	If triggered, begin planning (acquire funding and resources, conduct site feasibility analysis and site selection) to construct additional green streets projects.																				
Multiuse Treatment Areas																								
Infiltration and Detention Basins																								
CSD-MUTA-01	Mission Bay WMA (Tecolote Creek)	FY24, 25, 26, 27, 28	Continuous- Ongoing																					
CSD-MUTA-02	Mission Bay WMA (Scripps)	Must be triggered	Continuous- Ongoing	If triggered, begin planning (acquire funding and resources, conduct site feasibility analysis and site selection) to construct additional green streets projects.																				
CSD-MUTA-03	Los Peñasquitos WMA	FY21, FY22, FY23, FY24, FY25, FY26	Continuous- Ongoing																					
CSD-MUTA-04	Los Peñasquitos Creek Subwatershed (Los Peñasquitos WMA)	FY19	Continuous- Ongoing																					
CSD-MUTA-05	Los Peñasquitos Creek Subwatershed (Los Peñasquitos WMA)	Prior to FY16	Continuous- Ongoing																					
CSD-MUTA-06	Chollas Watershed	FY18	Continuous- Ongoing																					
CSD-MUTA-07	Chollas Watershed	FY14	Continuous- Ongoing																					
CSD-MUTA-08	Tijuana River WMA	Must be triggered	Continuous- Ongoing	If triggered, begin planning, acquiring funding and resources																				
CSD-MUTA-09	San Diego River WMA	FY19, FY20, FY21, FY22	Continuous- Ongoing																					
CSD-MUTA-10	San Dieguito River WMA (Rockwood Rd and Public Rd)	Must be triggered	Continuous- Ongoing	If triggered, begin planning, acquiring funding and resources																				
CSD-MUTA-11	San Dieguito River WMA (Between I15 and West Bernardo Dr., south of Ed Brown Center)	Must be triggered	Continuous- Ongoing	If triggered, begin planning, acquiring funding and resources																				
CSD-MUTA-12	San Dieguito River WMA	Must be triggered	Continuous- Ongoing	If triggered, begin planning, acquiring funding and resources																				
CSD-MUTA-13	Los Peñasquitos WMA	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.																				
CSD-MUTA-14	Mission Bay WMA	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.																				
CSD-MUTA-15	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.																				
Stream, Channel and Habitat Rehabilitation Projects (B.3.b.(1)(b)(iii))																								
CSD-MUTA-16	Los Peñasquitos Creek Subwatershed (Los Peñasquitos WMA)	Prior to FY16	Continuous- Ongoing																					

ID	Location	Implementation or Construction Year	Implementation Schedule	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	FY 32	FY 33	FY 34	FY 35
CSD-MUTA-17	Los Peñasquitos Creek Subwatershed (Los Peñasquitos WMA)	FY16	Continuous- Ongoing																					
CSD-MUTA-18	Mission Bay WMA (East side of Mission Bay Park between the Park and Clairemont)	Must be triggered	Continuous- Ongoing	If triggered, begin planning (acquire funding and resources, conduct site feasibility analysis and site selection) to implement rehabilitation projects.																				
CSD-MUTA-19	Mission Bay WMA (Rose Canyon)	Must be triggered	Continuous- Ongoing	If triggered, begin planning (acquire funding and resources, conduct site feasibility analysis and site selection) to implement rehabilitation projects.																				
CSD-MUTA-20	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.																				
Water Quality Improvement BMPs																								
Priority Development Projects (PDPs)																								
CSD-PDP-01	Los Peñasquitos WMA	Prior to FY16	Continuous- Ongoing																					
CSD-PDP-02	Mission Bay WMA	Prior to FY16	Continuous- Ongoing																					
CSD-PDP-03	San Diego Bay WMA	Prior to FY16	Continuous- Ongoing																					
CSD-PDP-04	San Diego River WMA	Prior to FY16, FY17	Continuous- Ongoing																					
CSD-PDP-05	San Dieguito River WMA	Prior to FY16	Continuous- Ongoing																					
CSD-PDP-06	Tijuana River WMA	Prior to FY16	Continuous- Ongoing																					
Proprietary BMPs																								
CSD-WQBMP-01	Carroll Canyon Creek Subwatershed (Los Peñasquitos WMA)	Prior to FY16	Continuous- Ongoing																					
CSD-WQBMP-02	Chollas (Along S 43rd street between Logan Avenue and Keeler Avenue)	FY14	Continuous- Ongoing																					
CSD-WQBMP-03	San Diego River WMA	FY17	Continuous- Ongoing																					
Dry Weather Flow Separation and Treatment Projects																								
CSD-WQBMP-04	Mission Bay WMA (Scripps)	2014	Continuous- Ongoing																					
CSD-WQBMP-05	Mission Bay WMA (Scripps)	2014	Continuous- Ongoing																					
CSD-WQBMP-06	Mission Bay WMA (Scripps)	2014	Continuous- Ongoing																					
CSD-WQBMP-07	Mission Bay WMA (Scripps)	2014	Continuous- Ongoing																					
CSD-WQBMP-08	Mission Bay WMA (Scripps)	2015	Continuous- Ongoing																					

ID	Location	Implementation or Construction Year	Implementation Schedule	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	FY 32	FY 33	FY 34	FY 35
CSD-WQBMP-09	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.																				
Trash Segregation																								
CSD-WQBMP-10	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.																				
Additional Opportunities																								
CSD-AddOp-01	Los Peñasquitos Lagoon Subwatershed (Los Peñasquitos WMA)	FY20	Continuous- Ongoing																					
CSD-AddOp-02	Los Peñasquitos WMA	FY28	Continuous- Ongoing																					
WMA Strategies (Optional Strategies, B.3.b.(2))																								
WMA-1	Los Peñasquitos Lagoon Subwatershed (Los Peñasquitos WMA)	FY16	Continuous- Ongoing																					
WMA-2	Los Peñasquitos WMA	Prior to FY16	Continuous- Ongoing																					
WMA-3	San Dieguito River WMA	Prior to FY16	Continuous- Ongoing																					
WMA-4	City-wide (except Chollas Watershed and San Diego River WMA)	Prior to FY16	Continuous- Ongoing																					
WMA-5	City-wide (Chollas Watershed specific)	Prior to FY16	Continuous- Ongoing																					
WMA-6	City-wide	Prior to FY16	Continuous- Ongoing																					
WMA-7	City-wide (San Dieguito River WMA specific)	Prior to FY16	Continuous- Ongoing																					
WMA-8	City-wide (Los Penasquitos WMA specific)	Prior to FY16	Continuous- Ongoing																					
WMA-9	City-wide (Mission Bay and San Diego River WMA specific)	Prior to FY16	Continuous- Ongoing																					
WMA-10	City-wide (Tijuana River WMA specific)	Prior to FY16	Continuous- Ongoing																					
WMA-11	Chollas Creek	Prior to FY16	Continuous- Ongoing																					
WMA-12	Los Peñasquitos, Mission Bay, and San Diego River WMAs	Prior to FY16	Continuous- Ongoing																					
WMA-13	San Dieguito River WMA	Must be triggered	Continuous- Ongoing	If triggered, begin planning, acquiring funding and resources																				
WMA-14	San Dieguito River WMA	Prior to FY16	Continuous- Ongoing																					
WMA-15	Tijuana River WMA	Prior to FY16	Continuous- Ongoing																					
WMA-16	Tijuana River WMA	Must be triggered	Continuous- Ongoing	If triggered, begin planning, acquiring funding and resources																				
WMA-17	Tijuana River WMA	Must be triggered	Continuous- Ongoing	If triggered, begin planning, acquiring funding and resources																				

ID	Location	Implementation or Construction Year	Implementation Schedule	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	FY 32	FY 33	FY 34	FY 35
WMA-18	Tijuana River WMA	Must be triggered	Continuous- Ongoing	If triggered, begin planning, acquiring funding and resources																				
WMA-19	Tijuana River WMA	Must be triggered	Continuous- Ongoing	If triggered, begin planning, acquiring funding and resources																				
WMA-20	Tijuana River WMA	Must be triggered	Continuous- Ongoing	If triggered, begin planning, acquiring funding and resources																				
WMA-21	San Diego River WMA	Must be triggered	Continuous- Ongoing	If triggered, begin planning, acquiring funding and resources																				
WMA-22	San Diego River WMA	Must be triggered	Completed within schedule	If triggered, begin planning, acquiring funding and resources																				