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## County of Sacramento

November 30, 2021

Ms. Elizabeth Lee, Unit Chief  
Municipal Storm Water Permitting Unit  
Central Valley Regional Water Quality Control Board  
11020 Sun Center Drive, Suite 200  
Rancho Cordova, CA 95670-6114

**SUBJECT: NPDES PERMIT NO. CAS0085324  
ORDER NO. R5-2016-0040  
END-TERM REPORT FOR FISCAL YEARS 2019-2021**

Dear Ms. Lee:

Electronically attached, and being submitted on behalf of the County of Sacramento and cities of Citrus Heights, Elk Grove, Folsom, Galt, Rancho Cordova and Sacramento (R5-2016-0040-04 thru 010), is the Sacramento Stormwater Quality Partnership's Regional Activities 2019-2021 End-Term Report.

Partnership activities include: Regional Program Management, the Monitoring and Target Pollutant Program, the Regional Public Outreach Program, and the Regional Commercial/Industrial Program. Partnership activities are conducted and financed jointly.

Due to file size, the appendices for the Regional End-Term Report will be placed on a USB drive and delivered to the Central Valley Regional Water Quality Control Board.

These reports were prepared to comply with the Sacramento Stormwater Permit's Attachment H A.15. **Standard Permit Provisions For Municipal Separate Storm Sewer Systems [40 CFR 122.42(c)]**.

An electronic copy of this report will also be sent to U.S. EPA, Region 9, as required by the Sacramento Stormwater Permit.

Please contact Dana Booth at 916-874-4389/BoothD@SacCounty.Net if you have any question or concerns regarding this submittal.

Sincerely,

Dana W. Booth, PG  
Program Manager - Stormwater Quality  
Sacramento County Department of Water Resources

cc: Regional Administrator, EPA Region 9

*"Managing Tomorrow's Water Today"*

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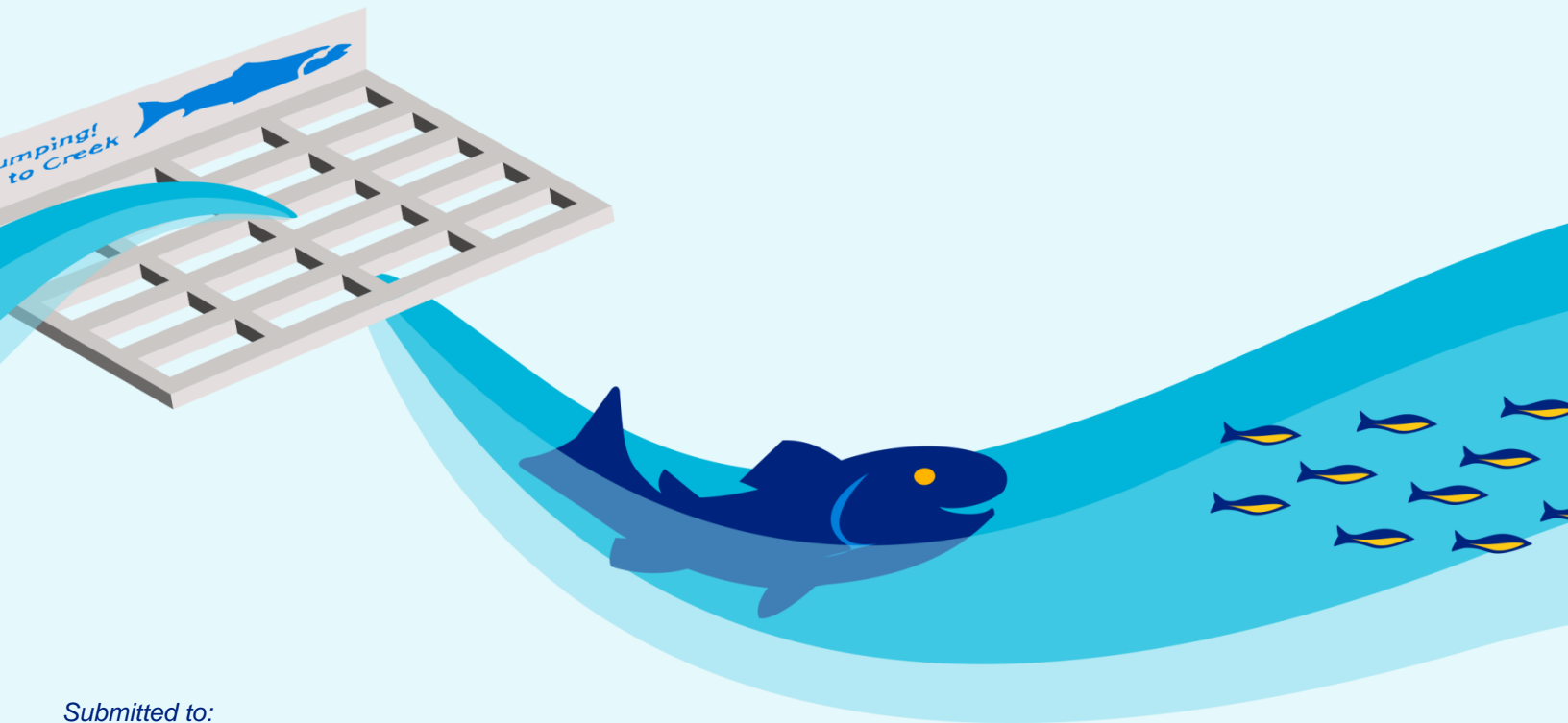
## Sacramento Stormwater Quality Partnership

*including the County of Sacramento and the cities of Sacramento, Citrus Heights, Elk Grove, Folsom, Galt, and Rancho Cordova*

# Regional Activities End-Term Report

## 2019-2021

November 2021



*Submitted to:*

**State of California Regional Water Quality Control Board**

Central Valley Region, 11020 Sun Center Drive #200, Rancho Cordova, CA 95670-6114

NPDES Stormwater Permit No. CAS0085324

# **Sacramento Stormwater Quality Partnership Regional Activities End-Term Report (2019-2021)**

(NPDES Permit No. CAS0085324, Order No. R5-2016-0040)

*For the County of Sacramento and Cities of Sacramento,  
Citrus Heights, Elk Grove, Folsom, Galt and Rancho Cordova*

**November 2021**

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# Glossary

## Commonly Used Acronyms and Terms for the Stormwater Quality Improvement Plan

### COMMONLY USED ACRONYMS

<i>Acronym/Term</i>	<i>Full Name</i>
AGC	Associated General Contractors of California
AIA	American Institute of Architects
ALEER	Action Level Exceedance Evaluation Report
ALs	Technology -based numeric action levels
ASCE	American Society of Civil Engineers
ASLA	American Society of Landscape Architects
ATS	Active Treatment System
BASMAA	Bay Area Stormwater Management Agencies Association
BAT	Best Available Technology
BCT	Best Conventional Pollutant Control Technology
BERC	Business Environmental Resource Center (for Sacramento area)
BIA	Building Industry Association
BLM	Biotic Ligand Model
BMP	Best Management Practice
BOD	Biochemical Oxygen Demand
CABs	Compliance Assistance Bulletins
Cal Fed	California Bay-Delta Authority
CAQ	Conservation Air Quality
CASQA	California Stormwater Quality Association
CaWaLUP	California Water and Land Use Partnership
CBSCP	Complaint-Based Stormwater Compliance Program
CCC	California Conservation Corps
CCSD	Cosumnes Community Services District
CELSOC	Consulting Engineers and Land Surveyors of California
CEQA	California Environmental Quality Act

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CFR	Code of Federal Regulations
CIP	Capital Improvement Project
CISCP	Commercial and Industrial Stormwater Compliance Program
CMP	Sacramento Coordinated Monitoring Program
COC	Constituents of Concern
COD	Chemical Oxygen Demand
CSWMP	Comprehensive Stormwater Management Plan
CTR	California Toxics Rule
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
CWBP	Clean Water Business Partner
DDT	Dichlorodiphenyl-trichloroethane
DI	Storm Drain Inlet
DO	Dissolved Oxygen
DOC	Dissolved Organic Carbon
DPR	California Department of Pesticide Regulation
DQEP	Data Quality Evaluation Plan
DQO	Data Quality Objective
DSP	Development Standards Plan
EHD	Environmental Health Division of the Environmental Management Department (Sacramento County)
EIR	Environmental Impact Report
EMD	Environmental Management Department (Sacramento County)
EPA	U.S. Environmental Protection Agency
ESC	Erosion and Sediment Control
FPPP	Facility Pollution Prevention Plan
FTE	Full Time Equivalent
GIS	Geographic Information System
HHW	Household Hazardous Waste
HMD	Hazardous Materials Division of the Environmental Management Department (Sacramento County)
HMP	Hydromodification Management Plan
ICBO	International Conference of Building Officials
IPM	Integrated Pest Management
ISAT	Impervious Surface Analysis

L&L	Landscaping & Lighting
LAFCo	(Sacramento) Local Area Formation Commission
LCWC	Laguna Creek Watershed Council
LID	Low Impact Development
LTE	Long Term Effectiveness
MCL	Maximum Contaminant Level
MDL	Method Detection Limit
MEP	Maximum Extent Practicable
mg/L	milligrams per liter
µg/L	micrograms per liter
MOU	Memorandum of Understanding
MS4	Municipal Separate Storm Sewer System
N/A	Not Applicable
NAWQA	National Water Quality Assessment
NEC	No Exposure Certification
NEL	Technology-based Numeric Effluent Limitations
NEMDC	Natomas East Main Drainage Canal
NEPA	National Environmental Policy Act
NOI	Notice of Intent
NONA	Notice of Non-Applicability
NOTs	Notice of Termination
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
NR	Natural Resources
NWQE	Notice of Water Quality Exceedance
OP	Organophosphorus (e.g., OP Pesticides)
OWOW	Our Water Our World
PAHs	Polycyclic Aromatic Hydrocarbons
PCO	Pest Control Operator
PCSWQCP	Post Construction Stormwater Quality Control Plans
PSSO	Private Sanitary Sewer Overflow
REAP	Rain Event Action Plan
RGO	Retail Gasoline Outlet
RMP	Risk Management Plan

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ROWD	Report of Waste Discharge
RWA	Regional Water Authority
RWLs	Receiving Water Limitations
RWQE	Report of Water Quality Exceedance
SACOG	Sacramento Area Council of Governments
SASD	Sacramento Area Sewer District
SCS	Stormwater Compliance Section within the Water Protection Division of the Environmental Management Department (Sacramento County)_
SIC	Standard Industrial Classification
SMUD	Sacramento Municipal Utility District
SPLASH	Students Protection Lake and Stream Habitats
SQIP	Stormwater Quality Improvement Plan
SRCS	Sacramento Regional County Sanitation District
SRWP	Sacramento River Watershed Program
SUSMP	Standard Urban Stormwater Mitigation Plan
SWAMP	Surface Water Ambient Monitoring Program
SWPPP	Stormwater Pollution Prevention Plan
SYRCL	South Yuba River Citizens League
TDS	Total Dissolved Solids
TIE	Toxicity Identification Evaluation
TMDL	total maximum daily load
TOC	Total Organic Carbon
TRE	Toxicity Reduction Evaluation
TSS	Total Suspended Solids
UPC	Urban Pesticide Committee
USBR	United States Bureau of Reclamation
USGS	United States Geological Survey
WDID	Waste Discharge Identification
WEF	Water Environment Federation
WPD	Water Protection Division of the Environmental Management Department (Sacramento County)
WQOs	Water Quality Objectives
WRAPP	Wetland and Riparian Area Protection Policy
WSCS	Wastewater Source Control Section of the Sacramento Regional County Sanitation District



**COMMONLY USED TERMS**

**303(d) List** : Section 303(d) of the Clean Water Act requires that each State in the U.S. create and maintain a list of Waters of the State that are not attaining water quality standards after technology-based limits are put into place. This list is commonly referred to as the “303(d) List”. In California, 303(d) Lists are developed and updated on an approximately triennial basis by the nine Regional Water Quality Control Boards (Regional Water Boards). For waters on this list (and where the EPA administrator deems they are appropriate) each Regional Board is to develop total maximum daily loads (TMDLs). EPA is required to review and approve updates to each 303(d) List, or establish an alternative list.

**Adverse Impact**: a detrimental effect upon water quality or beneficial uses caused by a discharge or loading of a pollutant or pollutants.

**Authorized Discharge**: any discharge that is authorized pursuant to a National Pollutant Discharge Elimination System (NPDES) permit or meets the conditions set forth in California Regional Water Quality Control Board Central Valley Region, Order No. R5-2015-0023, NPDES No. CAS082597...

**Bacteria**: Single-celled microorganisms that lack chlorophyll; some cause disease, others are necessary to sustain life.

**Baseflow**: Portion of stream flow that is not due to storm runoff and is supported by groundwater seepage into a channel.

**Basin Plan**: The *Water Quality Control Plan, Fourth Edition, for the Sacramento and San Joaquin River Basins*. The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve water quality objectives for all waters of the Basin.

**Best management practice (BMP)**: Methods, measures, or practices designed and selected to reduce or eliminate the discharge of pollutants to surface waters from point and nonpoint source discharges including stormwater. BMPs include structural and nonstructural controls, and operation and maintenance procedures, which can be applied before, during, and/or after pollution producing activities.

**Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technologies (BCT) or Best Practicable Treatment or Control (BPTC)**: Requirement of State Water Resources Control Board Resolution 68-16 – “Statement of Policy with Respect to Maintaining High Quality of Waters in California” (referred to as the “Antidegradation Policy”). BPTC is the treatment or control of a discharge necessary to assure that “(a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained.”

**Bioassessment (biological assessment)**: The use of biological community information, along with the measure of the physical/habitat quality, to determine the integrity of a water body. The EPA defines biological integrity as “*the ability of an aquatic ecosystem to support and maintain a balanced, integrated, adaptive community of organisms having a species composition, diversity and functional organization comparable to that of the natural habitats of a region.*”

**Biochemical oxygen demand (BOD)**: Quantity of dissolved oxygen used by microorganisms (e.g., bacteria) during the biochemical oxidation of matter (both organic and oxidizable inorganic matter) over a specified period of time.

**Biofiltration:** Use of natural materials and vegetation to trap and remove pollutants from stormwater.

**California Environmental Quality Act (CEQA)** – Process of informing governmental agencies and the public about the potential significant environmental effects of proposed activities. CEQA applies to projects undertaken, funded or requiring an issuance of a permit by a public agency.

**Channel:** Natural or artificial waterway that periodically or continuously contains moving water. Channels have a definite bed and banks that confine the water.

**Channel erosion:** Widening, deepening, and headward cutting of small channels and waterways due to erosion caused by moderate to larger floods.

**Check dam:** Small dam placed perpendicular to a stream to enhance aquatic habitat or placed perpendicular in swales to reduce runoff velocities, promote sediment deposition, and enhance infiltration.

**Chemical oxygen demand (COD):** Quantity of maximum oxidizable matter in a sample.

**Clean Water Act (CWA):** (33 U.S.C. 1251 et seq.) Requirements of the National Pollutant Discharge Elimination System (NPDES) program are defined under Sections 307, 402, 318, and 405 of the CWA.

**Commercial Facilities/Development:** Related to the Commercial/Industrial Element, refer to the Environmental Management Department's Fee Ordinance (Appendix F) and related to the New Development Element, refer to the Stormwater Quality Design Manual for Sacramento and South Placer Regions.

**Construction:** Clearing, grading, excavating, etc. that result in soil disturbance. Construction includes structure teardown. It does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of facility; emergency construction activities required to immediately protect public health and safety; interior remodeling with no outside exposure of construction material or construction waste to storm water; mechanical permit work; or sign permit work.

**Control:** To minimize, reduce, eliminate, or prohibit by technological, legal, contractual or other means, the discharge of pollutants from an activity or activities.

**Culvert:** Covered channel or a large diameter pipe that crosses under a road, sidewalk, etc.

**Debris:** Any material, organic or inorganic, floating or submerged, moved by a flowing stream.

**Design storm:** Rainfall event of specified size and return frequency that is used to calculate the runoff volume and peak flows to a stormwater quality treatment facility.

**Detention basin:** Constructed basin that temporarily stores stormwater runoff and releases it at controlled rates.

**Detention time:** Time required for detention of stormwater runoff in a stormwater quality facility.

**Development:** Any construction, rehabilitation, redevelopment or reconstruction of any public or private residential project (whether single-family, multi-unit or planned unit development); industrial, commercial, retail and other non-residential projects, including public agency projects; or mass grading for future construction. It does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of facility, nor does it include emergency construction activities required to immediately protect public health and safety.

**Development Standards:** standards that the Permittees must develop and implement for new development and significant redevelopment projects to control the discharge of stormwater pollutants.

**Discharge:** Release or flow of stormwater or other substance from a conveyance system or storage container.

**Dissolved oxygen:** Oxygen that is present (dissolved) in water and available for use by fish and other aquatic animals.

**Disturbed Area:** An area that is altered as a result of clearing, grading, and/or excavation.

**Diversion:** Channel, embankment or other man-made structure constructed to divert water from one area to another (Soil Conservation Society of America, 1982).

**Drawdown:** Gradual reduction in water level in a detention facility due to discharge by the outfall or combined effect of infiltration and evaporation.

**Drop inlet:** Entrance to the piped storm drain system designed to collect runoff from streets and pavements.

**Dry weather flow:** Flow occurring during the dry season (generally considered to be May through September) that may be associated with reservoir releases or releases of water from industrial, commercial, or residential activities.

**Environmental Impact Report (EIR)** - An EIR is an environmental document produced during the CEQA process to assess the significant environmental impacts of a project.

**End-of-pipe control:** Water quality control technologies suited for control of urban stormwater at the point of stormwater discharge to a waterway.

**Energy dissipation:** Loss of kinetic energy of moving water due to internal turbulence, boundary friction, change in flow direction, contraction, or expansion.

**Erosion:** Wearing away of land surface by wind or water. Occurs naturally from weather or runoff, but can be intensified by land-clearing practices relating to farming, residential or industrial development, road building, or timber cutting.

**Floodplain:** Any low land that borders a stream or waterway and is inundated periodically by its waters.

**Freeboard:** Vertical distance between design water surface elevation and elevation of the bank, levee or revetment that contains the water.

**General Permit for Stormwater Discharges Associated with Construction Activities (Construction General Permit):** the general NPDES permit adopted by the State Board, which authorizes the discharge of stormwater from construction activities under certain conditions.

**General Permit for Stormwater Discharges Associated with Industrial Activities (Industrial General Permit):** the general NPDES permit adopted by the State Water Board which authorizes the discharge of stormwater from certain industrial activities under certain conditions.

**Grading:** Cutting and/or filling of land surface to a desired slope or elevation.

**Gravitational settling:** Tendency of particulate matter to “drop out” of stormwater runoff as it flows downstream when runoff velocities are moderate and/or slopes are not too steep.

**Groundwater table:** Level below which the soil is saturated (i.e., where pore spaces between individual soil particles are filled with water).

**Habitat:** Place where a biological organism lives. Describes the organic and non-organic surroundings that provide life requirements such as food and shelter.

**Hazardous material or substance:**

1. Any material that poses a threat to human health and/or the environment. Typical hazardous substances are toxic, corrosive, ignitable, explosive, or chemically reactive.
2. Any substance named by EPA to be reported if a designated quantity of the substance is spilled in the waters of the United States or otherwise emitted into the environment.

**Hazardous waste:** By-products of industrial processes or society that can pose a substantial or potential hazard to human health or the environment when improperly managed. Possesses at least one of four characteristics (flammable, corrosive, reactive, or toxic) or appears on special EPA lists.

**Heavy metals:** Metals of relatively high atomic weight, including but not limited to chromium, copper, lead, mercury, nickel, and zinc. These metals are found in minimal quantities in stormwater, but can be highly toxic even at trace levels.

**Hydrology:** A scientific discipline concerned with the waters of the Earth, including their occurrence, distribution, and circulation via the hydrologic cycle and interactions with living things. It also deals with the chemical and physical properties of water in all its phases.

**Hydromodification:** The change in the natural watershed hydrologic processes and runoff characteristics (i.e., interception, infiltration, overland flow, interflow, and groundwater flow) caused by urbanization or other land use changes that result in increased stream flows and sediment transport. In addition, alteration of stream and river channels, installation of dams and water impoundments, and excessive stream bank and shoreline erosion are also considered hydromodification, due to their disruption of natural watershed hydrologic processes.

**Illicit Connection:** Any man-made conveyance that is connected to the storm drain system without a permit, excluding roof drains and other similar type connections. Examples include channels, pipelines, conduits, inlets, or outlets that are connected directly to the storm drain system.

**Illicit Discharge:** Any discharge to the storm drain system that is prohibited under local, state, or federal statutes, ordinances, codes, or regulations. The term illicit discharge includes all non stormwater discharges except discharges pursuant to an NPDES permit, discharges that are identified in **Discharge Prohibitions** of California Regional Water Quality Control Board Central Valley Region, Order No. R5-2015-0023, NPDES No. CAS082597, and discharges authorized by the Regional Water Board.

**Impermeable:** Properties that prevent the movement of water through the material.

**Impervious surface:** Material that resists or blocks the passage of water.

**Industrial Facilities/Development:** Related to the Commercial/Industrial Element, refer to the Environmental Management Department's Fee Ordinance (Appendix F) and related to the New Development Element, refer to the Stormwater Quality Design Manual for Sacramento and South Placer Regions.

**Infiltration:** The downward entry of water into the surface of the soil.

***Infiltration basin:*** A basin where incoming stormwater runoff is stored until it gradually infiltrates through the soil of the basin floor.

***Inlet:*** Entrance into a ditch, storm drain system, stormwater treatment facility, or other waterway.

***Inspection:*** entry and the conduct of an on-site review of a facility and its operations, at reasonable times, to determine compliance with specific municipal or other legal requirements. The steps involved in performing an inspection, include, but are not limited to:

- a. Pre-inspection documentation research;
- b. Request for entry;
- c. Interview of facility personnel;
- d. Facility walk-through.
- e. Visual observation of the condition of facility premises;
- f. Examination and copying of records as required;
- g. Sample collection if necessary or required;
- h. Exit conference to discuss preliminary evaluation; and,
- i. Report preparation, and if appropriate, recommendations for coming into compliance.

***Level spreader:*** Device used to spread out stormwater runoff uniformly over the ground surface as sheet flow (i.e., not through channels). The purpose of level spreaders is to prevent concentrative, erosive flows from occurring and to enhance infiltration.

***Low Impact Development (LID):*** A stormwater management and land development strategy that emphasizes conservation and the use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely reflect pre-development hydrologic functions.

***Maximum Extent Practicable (MEP):*** The technology-based standard established by Congress in CWA section 402(p)(3)(B)(iii) that operators of MS4s must meet. Technology-based standards establish the level of pollutant reductions that dischargers must achieve; typically by treatment or by a combination of source control and treatment control BMPs. MEP generally emphasizes pollution prevention and source control BMPs primarily (as the first line of defense) in combination with treatment methods serving as a backup (additional line of defense). MPE considers economics and is generally, but not necessarily, less stringent than BAT. A definition for MEP is not provided either in the statute or in the regulations. Instead the municipalities propose their definition of MEP by way of their storm water management plans (SWMP). The Permittees' total collective and individual activities conducted pursuant to the storm water management plans (i.e. Stormwater Quality Improvement Plan or SQIP) becomes their proposal for MEP as it applies both to their overall effort, as well as to specific activities (e.g., MEP for street sweeping, or MEP for MS4 maintenance). For a fuller discussion of this standard see California Regional Water Quality Control Board Central Valley Region, Order No. R5-2015-0023, NPDES No. CAS082597.

***Method Detection Limit (MDL):*** The minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in 40 CFR 136, Appendix B.

***Monitoring Program:*** Sacramento Stormwater Monitoring Program

***Municipal Separate Storm Sewer System (MS4):*** A conveyance or system of conveyances (including roads with drainage systems, municipal streets, alleys, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) owned by a State, city, county, town or other public body that is designed or used for collecting or conveying stormwater, which is not a combined sewer, and which is not part of a publicly owned treatment works, and which discharges to Waters of the United States.

***Natural buffer:*** Low sloping area of maintained grassy or woody vegetation located between a pollutant source and a waterbody. A natural buffer is formed when a designated portion of a developed piece of land is left unaltered from its natural state during development.

***National Pollutant Discharge Elimination System (NPDES):*** The national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits under CWA §307, 402, 318, and 405.

***Natural Drainage Systems:*** Unlined or unimproved (not engineered) creeks, streams, rivers or similar waterways.

***New Development:*** Land disturbing activities; structural development, including construction or installation of a building or structure, and creation of impervious surfaces.

***Non-stormwater discharge:*** Any discharge to a storm drain that is not composed entirely of stormwater. Certain non-stormwater discharges are authorized per the Sacramento NPDES Municipal Stormwater Permit.

***Non-structural source control measure:*** Low-technology, low-cost activity, procedure or management practice designed to prevent pollutants associated with site functions and activities from being discharged with stormwater runoff. Examples include good housekeeping practices, employee training, standard operating practices, inventory control measures, etc.

***Notice of Intent (NOI):*** Formal notice to State Water Resources Control Board submitted by the owner/developer that a construction project is about to begin. The NOI provides information on the owner, location and type of project, while certifying that the permittee will comply with the conditions of the construction general permit.

***NPDES Permit:*** Authorization, license or equivalent control document issued by EPA or an approved state agency to implement requirements of the NPDES program. An NPDES stormwater permit relates to discharge of stormwater runoff to waters of the United States.

***Nutrients:*** Elements or substances such as nitrogen or phosphorous that are necessary for the growth and development of living things (e.g., plants). Large amounts of these substances reaching water bodies can lead to reduced water quality and eutrophication by promoting excessive aquatic algae growth. Some nutrients can be toxic at high concentrations.

***Outfall:*** Point where stormwater discharges from a pipe, channel, ditch, or other conveyance to a waterway.

***Partnership:*** Sacramento Stormwater Quality Partnership

***Partnership Activities:*** Activities done regionally by the Sacramento Stormwater Quality Partnership. Also called *regional activities*.

***Partnership Program:*** Sacramento Stormwater Quality Partnership Program including regional activities implemented jointly by the permittees.

**Performance Standard:** A narrative or measurable number specifying the minimum acceptable outcome for a pollution control practice.

**Permeability:** Quality of a soil horizon that enables water or air to move through it.

**Permittees:** Co-Permittees and any agency named in California Regional Water Quality Control Board Central Valley Region, Order No. R5-2015-0023, NPDES No. CAS082597 as being responsible for permit conditions within its jurisdiction. Permittees to California Regional Water Quality Control Board Central Valley Region, Order No. R5-2015-0023, NPDES No. CAS082597 include the County of Sacramento and the cities of Citrus Heights, Elk Grove, Folsom, Galt, Rancho Cordova and Sacramento.

**Pesticide Plan:** Pesticide Toxicity Control Plan

**Pollutants:** Those substances defined in CWA §502(6) (33.U.S.C. §1362(6)), and incorporated by reference into California Water Code §13373.

**Pollution:** Impairment of water quality caused by man-made waste discharges or natural processes.

**Precipitation:** Any form of rain or snow.

**Pretreatment:** Treatment of wastewater before it is discharged to a wastewater collection system.

**Priority Projects:** Those projects that are required to incorporate appropriate stormwater mitigation measures into the design for their respective project. Refer to the Stormwater Quality Design Manual for the Sacramento and South Placer Regions for more details.

**Process wastewater:** Wastewater that has been used in one or more industrial processes.

**Project:** All development, redevelopment, and land disturbing activities.

**Rain Event or Storm Event:** Any rain event greater than 0.1 inch in 24 hours except where specifically stated otherwise

**Receiving Waters:** All surface water bodies in the Central Valley Region that are identified in the Basin Plan.

**Receiving Water Limitations (RWLs):** Waste discharge requirements issued by the Regional Board typically include both: (1) “Effluent Limitations” (or “Discharge Limitations”) that specify the technology-based or water-quality-based effluent limitations; and (2) “Receiving Water Limitations” that specify the water quality objectives in the Basin Plan as well as any other limitations necessary to attain those objectives. In summary, the “Receiving Water Limitations” provision is the provision used to implement the requirement of CWA section 301(b)(1)(c) that NPDES permits must include any more stringent limitations necessary to meet water quality standards.

**Redevelopment:** Land-disturbing activity that results in the creation, addition, or replacement of impervious surface area on an already developed site. Redevelopment includes, but is not limited to: the expansion of a building footprint; addition or replacement of a structure; replacement of impervious surface area that is not part of a routine maintenance activity; and land disturbing activities related to structural or impervious surfaces.

**Regional Water Board:** Central Valley Regional Water Quality Control Board

**Restaurant:** A facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC Code 5812).

**Retail Gasoline Outlet (RGO):** Any facility engaged in selling gasoline and lubricating oils.

**Retention:** Temporary or permanent storage of stormwater to prevent it from leaving the development site.

**Retrofit:** Creation/modification of stormwater management systems in developed areas through construction of water quality basins, stream plantings, stream bank stabilization, and other techniques for improving water quality and creating aquatic habitat. A retrofit can mean construction of a new stormwater quality treatment facility in the developed area, enhancement of an older stormwater management structure, or a combination of improvement and new construction.

**Riparian:** Relatively narrow strip of land that borders a stream or river, which often coincides with the maximum water surface elevation of the one-hundred year storm.

**Riprap:** Combination of large stones, cobbles, and boulders used to line channels, stabilize banks, reduce runoff velocities, or filter out sediment.

**Run-off:** Any runoff including stormwater and dry weather flows from a drainage area that reaches a receiving water body or subsurface. During dry weather it is typically comprised of base flow either contaminated with pollutants or uncontaminated, and nuisance flows.

**Run-on:** Stormwater or other surface flow which enters property other than that where it originated.

**Scour:** Concentrated erosive action of flowing water in streams that removes material from the bed and banks.

**Sedimentation:** Process of sand and mud settling and building up on the bottom of a creek, river, lake, or wetland.

**Sediments:** Soil, sand and minerals washed from land into water, usually after rain, that accumulate in reservoirs, rivers and harbors, destroying aquatic animal habitat and clouding the water so that adequate sunlight might not reach aquatic plants.

**Sheet flow:** Water, usually storm runoff, flowing in a thin layer over the ground surface (Soil Conservation Society of America, 1982).

**Slope:** Degree of deviation of a surface from the horizontal, measured as a percentage, a numerical ratio, or in degrees (Soil Conservation Society of America, 1982).

**Source control BMP:** Any schedules of activities, prohibitions of practices, maintenance procedures, managerial practices or operational practices that aim to prevent stormwater pollution by reducing the potential for contamination at the source of pollution.

**State Water Board:** State Water Resources Control Board (California)

**Storm drains:** Above and below ground structures for transporting stormwater to streams or outfalls for flood control purposes.

**Stormwater:** Stormwater runoff, snow melt runoff, surface runoff, and drainage.

**Stormwater conveyance system or storm drain system:** Any channel or pipe for collecting and directing stormwater.

**Stormwater discharge associated with industrial activity:** Discharge from any conveyance that is used for collecting and conveying stormwater which is directly related to manufacturing processing or raw materials storage areas at an industrial plant [40 CFR 122.26(b)(14)].

**Stormwater Permit:** Sacramento Area-wide MS4 NPDES Stormwater Permit



**Stormwater runoff:** Excess precipitation that is not retained by vegetation, surface depressions or infiltration, which thereby collects on the surface and drains into a surface water body.

**Stormwater treatment:** Detention, retention, filtering, or infiltration of a given volume of stormwater to remove urban pollutants.

**Stream buffer:** Variable width strip of vegetated land adjacent to a stream that is preserved from development activity to protect water quality, aquatic, and terrestrial habitats.

**Structural BMP:** Any structural facility designed and constructed to mitigate the adverse impacts of stormwater and urban runoff pollution (e.g. canopy, structural enclosure). The category may include both Treatment Control BMPs and Source Control BMPs.

**Sump:** Sediment trap used as pretreatment upstream of a filtration or infiltration device. Sump can have many configurations. The word “sump” has also been used in reference to drywells.

**Target Pollutants :** Pollutants identified by the permittees as most likely to impair local receiving waters, based on evaluation of available monitoring data and other information that describe its surface configuration (Soil Conservation Society of America, 1982).

**Total Maximum Daily Load (TMDL):** The sum of the individual waste load allocations for point sources and load allocations for nonpoint sources and natural background. A TMDL is the maximum pollutant load a waterbody can assimilate each day from all sources combined and still maintain applicable water quality standards for that pollutant.

**Toxic:** Related to or caused by a poison, hazardous waste or toxin.

**Toxicity Identification Evaluation (TIE):** a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.

**Toxicity Reduction Evaluation (TRE):** a study conducted in a step-wise process to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity.

**Treatment:** The application of engineered systems that use physical, chemical, or biological processes to remove pollutants. Such processes include, but are not limited to, filtration, gravity settling, media absorption, biodegradation, biological uptake, chemical oxidation, and UV radiation.

**Treatment Control BMP:** Any engineered system designed to remove pollutants by simple gravity settling of particulate pollutants, filtration, biological uptake, media absorption or any other physical, biological, or chemical process.

**Urban runoff:** Stormwater that passes through and out of developed areas to a stream or other body of water.

**Vegetated filter strip:** Vegetated section of land designed to accept runoff as overload sheet flow from upstream development. A vegetated filter strip differs from a natural buffer in that the strip is not “natural;” rather, it is designed and constructed specifically for pollutant removal.

**Vegetated swale:** An earthen conveyance system in which the filtering action of grass and soil infiltration are utilized to remove pollutants from urban stormwater. An enhanced grass swale, or biofilter, utilizes check dams and wide depressions to increase runoff storage and promote greater settling of pollutants.

**Velocity:** Distance that water travels in a given direction in a stream during an interval of time.

**Watershed or drainage basin:** Geographic area within which all surface water drains into a particular body of water (e.g., a river or stream).

**Water Quality Standards and Water Quality Objectives:** Water quality criteria contained in the Basin Plan, the National Toxics Rule, the California Toxics Rule, and other state or federally approved surface water quality plans. Such plans are used by the Regional Board to regulate all discharges, including stormwater discharges.

**Waters of the State:** any surface water or groundwater, including saline waters, within boundaries of the state.

**Waters of the United States:**

- a. All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- b. All interstate waters, including interstate wetlands;
- c. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
  1. Which are or could be used by interstate or foreign travelers for recreational or other purposes;
  2. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
  3. Which are used or could be used for industrial purposes by industries in interstate commerce;
- d. All impoundments of waters otherwise defined as waters of the United States under this definition;
- e. Tributaries of waters identified in paragraphs (a) through (d) of this definition;
- f. The territorial sea; and
- g. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraph (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.22(m), which also meet the criteria of this definition) are not waters of the United States. This exclusion applies only to man-made bodies of water, which neither were originally created in waters of the United States (such as disposal area in wetlands) nor resulted from the impoundment of waters of the United States. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with U.S. EPA.

**Wet Season:** The calendar period beginning October 1 and ending April 30.

**Weir:** Structure that extends across the width of a channel and is intended to impound, delay or in some way alter the flow of water through the channel. Dams of any kind, including check dams, are considered weirs.

**Wet weather flow:** Water derived primarily from rain, melting snow or irrigation during the wet season (generally considered to be October through April) that flows over the ground surface.

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# Sacramento Stormwater Quality Partnership

## 2019-2021 Regional Activities End-Term Report

### Introduction

The Sacramento Stormwater Quality Partnership (Partnership) is comprised of the County of Sacramento and the cities of Sacramento, Citrus Heights, Elk Grove, Folsom, Galt, and Rancho Cordova. The Partnership collectively implements the Partnership Regional activities described in Chapter 2 of the Stormwater Quality Improvement Plan (SQIP) (November 2009) in addition to their agency-specific activities. The Partnership Regional Activities include Regional Program Management, Regional Monitoring and Target Pollutant Program (formerly the Monitoring Program and Target Pollutant Program), Regional Public Outreach Program and Regional Commercial/Industrial Program. These programs are implemented regionally because it is more cost effective or is necessary to ensure a consistent approach to urban runoff management in the greater Sacramento area. Typically, either the County or City of Sacramento (the two largest Permittees) take the lead in implementing the regional activities on behalf of the other Partnership agencies. These Partnership Regional Activities are currently cost shared under a memorandum of understanding adopted in 2012.

The Central Valley Regional Water Quality Control Board (Regional Water Board) adopted the MS4 General Permit<sup>1</sup> on June 23, 2016. The Sacramento Permittees (or individual Partnership agencies) applied for coverage under this new MS4 General Permit when our Limited Term Stormwater NPDES Permit<sup>2</sup> expired on November 1, 2016. The Sacramento Permittees' MS4 General Permit, Notice of Applicability was effective on November 30, 2016. The MS4 General Permit requires the continued implementation of the Permittees' 2009 SQIP and the associated annual work plans approved on January 29, 2010 (Resolution No. R5-2010-0017) and required by the 2008 Stormwater NPDES Permit<sup>3</sup>. The Permittees submitted a 3year Work Plan (2016-2019) with their Notice of Intent in November 2016 to augment the 2009 SQIP annual work plans. The Permittees submitted a 2 year work plan (2019-2021) with the Mid-Term Report and a 2 year work plan (2021-2023) was submitted on August 30, 2021.

The MS4 General Permit requires Annual Reports (Provision V.F.4), Mid-Term Reports, and End-Term Reports (Provision V.F.5). The Mid-Term and End-Term Reports serve as the Annual Report for the years submitted. Effectiveness assessments (Provision V.E.5) will be conducted after approval of the Reasonable Assurance Analysis (RAA) and revised Stormwater Quality Improvement Plan (SQIP). A summary of the annual reporting schedule is provided in Table 1.

**Table 1. Annual Reporting Schedule**

Permit/Fiscal Year	Report Type & Reporting Period	Due Date
Year 1 (2016-2017)	Annual Report (2016/2017)	October 1, 2017
Year 2 (2017-2018)	Annual Report (2017/2018)	October 1, 2018
Year 3 (2018-2019)	Mid-Term Report (2016-2019)	November 30, 2019
Year 4 (2019-2020)	Annual Report (2019/2020)	October 1, 2020
<b>Year 5 (2020-2021)</b>	<b>End-Term Report (2019-2021)</b>	<b>November 30, 2021</b>

<sup>1</sup> National Pollutant Discharge Elimination System (NPDES) and Waste Discharge Requirements (WDR) General Permit for Discharges from Municipal Separate Storm Sewer System (MS4): NPDES No. CAS0085324, Order No. R5-2016-0040-001 thru -010

<sup>2</sup> NPDES and WDR for Cities of Citrus Heights, Elk Grove, Folsom, Galt, Rancho Cordova, Sacramento, and County of Sacramento Storm Water Discharges from MS4 Sacramento County: NPDES No. CAS082597, Order No. R5-2015-0023

<sup>3</sup> NPDES and WDR for Cities of Citrus Heights, Elk Grove, Folsom, Galt, Rancho Cordova, Sacramento, and County of Sacramento Storm Water Discharges from MS4 Sacramento County: NPDES No. CAS082597, Order No. R5-2008-0142

This Partnership 2019-2021 Regional Activities End-Term Report has been prepared per Section V.F.5 of the MS4 General Permit and includes a cumulative summary of SQIP and work plan activities including a description of the activities related to inspections, enforcement actions, public outreach programs and monitoring data (MS4 General Permit Attachment H, No. 15); the fiscal analysis; and any proposed modifications to the SQIP or work plans. The 2019-2021 End-Term Report does not include a status of progress towards attainment of SQIP milestones or short-term effectiveness assessments since the Partnership's Reasonable Assurance Analysis and Priority Water Quality Constituent strategies and milestones are under review by the Regional Water Board. The Permittees' Agency-specific 2019-2021 End-Term Reports are being submitted separately by each Permittee.

The overall goals of the Partnership's 2009 SQIP are to: "a) reduce degradation of waters of the State and waters of the United States (U.S.) by urban runoff and protect their beneficial uses; and, b) develop and implement an effective SQIP that is well understood and broadly supported by regional stakeholders." The core objectives and strategies of the SQIP are further described in Section 1.2 of the 2009 SQIP.

## **Implementation Statement**

During the 2019/2020 and 2020/2021 fiscal years, the Partnership implemented the Regional Activities of the Stormwater Quality Improvement Program consistent with the intent of the 2009 SQIP (and modifications thereto) and as described in the 2-Year Work Plan (2019-2021) submitted in July 2019. Agency-specific End-Term reports are being submitted separately by each agency and include their activities as described in Chapters 3 through 9 of the 2009 SQIP and in the 2-Year Work Plan (2019-2021).

## **Proposed Modifications**

The Partnership's 2021/2022 and 2022/2023 Work Plans that were submitted to the Regional Water Board on August 30, 2021 are included in Appendix Intro-1. There are no changes proposed to the SQIP or annual work plans.

## **Structure**

This Report is divided into the following Sections:

- Introduction
- Regional Program Management
- Regional Monitoring and Target Pollutant Program
- Regional Public Outreach Program
- Regional Commercial/Industrial Program

Within each Section, task numbers are from the 2-Year Work Plans (2019-2021).

Steven L. Hartwig  
Deputy County Executive

Department of Water Resources  
Michael L. Peterson, Director



Ann Edwards  
County Executive

## County of Sacramento

### SACRAMENTO STORMWATER QUALITY PARTNERSHIP

### REGIONAL ACTIVITIES END-TERM REPORT (2019-2021)

NPDES PERMIT NO. CAS0085324

### CERTIFICATION

In accordance with Title 40, Section 122.22, Paragraphs (a)(3), (b)(1) and (d) of the Code of Federal Regulations

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations."

Date: \_\_\_\_\_

10/29/21

MICHAEL L. PETERSON, Director

Department of Water Resources



*The City of CITRUS HEIGHTS  
is committed to providing  
high quality, economical,  
responsive city services  
to our community.*

CHRISTOPHER W. BOYD, *City Manager* • RYAN R. JONES, *City Attorney*



Phone: 916.683.7111  
Fax: 916.627.4400

[www.elkgrovecity.org](http://www.elkgrovecity.org)

PUBLIC WORKS  
8401 Laguna Palms Way  
Elk Grove, California 95758



## SACRAMENTO STORMWATER QUALITY PARTNERSHIP

### REGIONAL ACTIVITIES END-TERM REPORT (2019-2021) NPDES PERMIT NO. CAS0085324

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Amittoj Thandi, Senior Civil Engineer

Date: \_\_\_\_\_

11/17/2021



## Public Works Department

### SACRAMENTO STORMWATER QUALITY PARTNERSHIP

### REGIONAL ACTIVITIES END-TERM REPORT (2019-2021) NPDES PERMIT NO. CAS0085324

### CERTIFICATION

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Executed on the 23rd day of November , 2021,

at Galt, CA.

---

Bill Forrest  
Senior Civil Engineer  
City of Galt Department of Public Works



CITY OF  
**FOLSOM**  
DISTINCTIVE BY NATURE

**SACRAMENTO STORMWATER QUALITY PARTNERSHIP**

**REGIONAL ACTIVITIES END-TERM REPORT (2019-2021)**

**NPDES PERMIT NO. CAS0085324**

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Mark Rackovan, P.E.

Public Works Director

Date: \_\_\_\_\_

11/8/21

## SACRAMENTO STORMWATER QUALITY PARTNERSHIP

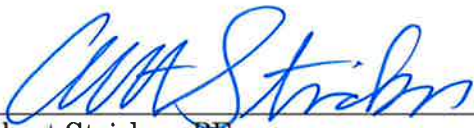
### REGIONAL ACTIVITIES END-TERM REPORT (2016-2021)

NPDES PERMIT NO. CAS0085324

### CERTIFICATION

In accordance with Title 40, Section 122.22, Paragraphs (a)(3), (b)(1) and (d) of the Code of Federal Regulations

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations."

  
Albert Stricker, PE  
Public Works Director  
City of Rancho Cordova  
General Order No. R5-2016-0040-008

Date: 11-19-21

**SACRAMENTO STORMWATER QUALITY PARTNERSHIP**

**REGIONAL ACTIVITIES END-TERM REPORT (2019/2020 – 2020/2021)**

**NPDES PERMIT NO. CAS0085324**

**CERTIFICATION**

In accordance with Title 40, Section 122.22, Paragraphs (a)(3), (b)(1) and (d) of the Code of Federal Regulations,

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.”

  
Tony Bertrand (Nov 9, 2021 13:19 PST)

Date: **Nov 9, 2021**

---

Tony Bertrand, Engineering Manager  
Department of Utilities  
City of Sacramento  
(General Order No. R5-2016-0040-009)

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## Regional Program Management

### Introduction

The Sacramento Stormwater Quality Partnership (Partnership) was originally established to coordinate the Sacramento Areawide NPDES Municipal Stormwater Permit (Stormwater Permit) compliance activities throughout the Permittees' jurisdictional areas with the objective of improving water quality in receiving waters identified in the Stormwater Permit, including urban creeks, the Sacramento River and the American River. The Partnership intends to continue this coordination for the MS4 General Permit.

The Permittees entered into a memorandum of understanding (MOU) that formalizes the manner in which the Permittees address common issues, promote consistency among each Permittees' stormwater programs, coordinate resources related to regional activities, and plan and coordinate activities required to comply with the Stormwater Permit. The MOU includes a cost-share percentage (based on population) for each Permittee for regional activities (also referred to as Partnership or joint activities). A Steering Committee, consisting of representatives designated by each Permittee, was established to provide a forum for making decisions and providing guidance to the Permittees relative to the implementation of regional activities.

Regional activities include the Monitoring and Target Pollutant Program, the Regional Public Outreach Program and the Regional Commercial/Industrial Program. Permittee- specific activities conducted in addition to regional activities are described in each agency's Annual Report.

The goal of Program Management is to administer and manage the Partnership's Regional Stormwater Quality Program to ensure continued compliance with the MS4 General Permit. The County's Stormwater Program Manager and the City of Sacramento's Stormwater Program Manager oversee performance of the activities and preparation of compliance deliverables described in the Partnership's Stormwater Quality Improvement Plan dated November 2009 and adopted by the Regional Water Board on January 29, 2010 (SQIP). The SQIP is an enforceable part of the MS4 General Permit.

### Activities

All activities required by the MS4 General Permit, 2009 SQIP and the 2-Year Work Plans (2019-2021) were completed. The section numbers reflect the chapters outlined in the 2009 SQIP and the task numbers are from the 2-year Work Plan (2019-2021).

#### PM.1 Regulatory Submittal

##### PM.1.1 Conduct Steering Committee Meetings

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
NA	↔	↔	↔

#### Summary of Work Completed

The Steering Committee oversees Partnership permit compliance activities and provides leadership for implementation of the regional activities. The Permittees coordinate and make decisions through regular meetings of this Steering Committee and via electronic mail and telephone. The Steering Committee meets every other month and typical agenda topics include joint budget updates, regional monitoring activities, Delta Regional Monitoring Program updates, Sacramento County Environmental Management Department (EMD) coordination, regional outreach, report and work plan development, target pollutant reduction strategies (e.g., methylmercury and pesticides), new development/redevelopment standards coordination and Federal and Statewide policies or programs (e.g., Trash Amendments, TMDLs, etc.). The Steering Committee met nine times during the 2019/2020 and 2020/2021 fiscal years: August 7 and October 2 in 2019; February 5, May 6, August 5, October 7, December 2 in 2020; and February 3 and June 2, 2021.

---

**PM.1.2 Submit a Notice of Intent (NOI) and a Preliminary Pollutant Prioritization Approach under the MS4 General Permit<sup>1</sup>**


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PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.B.1, V.F.1			

**Summary of Work Completed**

On November 1, 2016, the Partnership submitted a Notice of Intent (NOI) package that included: the NOI Forms for each of the individual Partnership agencies; the Partnership's Preliminary Pollutant Prioritization Approach; and 3-year Work Plans (2016 – 2019).

---

**PM.1.3 Submit Permittees' Partnership Regional Activities updated Work Plan including the Monitoring Plan**


---

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
NA		◆	

**Summary of Work Completed**

On November 1, 2016, the Partnership submitted a NOI package including 3-year Work Plans (2016 – 2019) for both agency-specific activities and regional activities. The Partnership's Regional Activities 2-Year Work Plan (2019 – 2021) was submitted to the Regional Water Board with the 2019 Mid-Term Report in November 2019. The 2021/2022 and 2022/2023 Regional Work Plan was submitted to the Regional Water Board on August 30, 2021 and is included in Appendix Intro-1.

---

**PM.1.4 Submit Permittees' Partnership Regional Activities Annual Report**


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PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.F.4	◆		◆

**Summary of Work Completed**

On October 1, 2020, the Partnership submitted the Regional Activities Annual Report (AR) for the Fiscal Year of 2019/2020. Per Permit section V.F.5, this End-Term report serves as the Fiscal Year 2020/2021 annual report.



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**PM.1.5 Submit Pollutant Assessment and Prioritization results and methodology for proposed Reasonable Assurance Analysis (RAA)**


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PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.1 – 3, V.F.2			

**Summary of Work Completed**

On May 30, 2017, the Partnership submitted its Pollutant Assessment and Prioritization results and a proposed Reasonable Assurance Analysis (RAA) methodology. The Regional Water Board provided comments on July 2, 2018, which set the deadline for the RAA, including milestones, to be July 2, 2019, and required a Supplemental Report. The Partnership submitted the Supplemental Report on October 2, 2018 that included additional data summaries and the requested revisions.

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**PM.1.6 Submit Strategies, Milestones and RAA**


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PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3, V.F.2		◆	

**Summary of Work Completed**

On July 1, 2019, the Partnership submitted the Reasonable Assurance Analysis (RAA). The RAA contained strategies and milestones for each of the Priority Water Quality Constituents (PWQCs).

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**PM.1.7 Submit Draft Stormwater Quality Improvement Plan (SQIP) (e.g., SWMP)**


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PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3, V.F.2	◆	◆	

**Summary of Work Completed**

On July 1, 2019, the Partnership submitted the RAA which also contained strategies and milestones for each of the PWQCs. Three (3) months after Regional Water Board approval, the Partnership will submit a Draft Stormwater Quality Improvement Plan (SQIP).

---

**PM.1.8 Address Regional Water Board SQIP comments and submit final SQIP**


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PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3, V.F.2	◆	◆	

**Summary of Work Completed**

On July 1, 2019, the Partnership submitted the RAA which also contained strategies and milestones for each of the PWQCs. Three (3) months after RWB approval, the Partnership will submit a Draft Stormwater Quality Improvement Plan (SQIP). Three (3) months after receipt of Regional Water Board comments on the Draft SQIP, the Partnership will submit a final SQIP that addresses the Regional Water Board comments.

**PM.1.9 Submit Partnership Mid-Term Report**

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.F.5		◆	

**Summary of Work Completed**

Pursuant to the Permit requirements of Section V.F.5, the 2019 Mid-Term Report was submitted on November 30, 2019.

**PM.1.10 Submit Partnership End-Term Report**

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.F.5			

**Summary of Work Completed**

Pursuant to the Permit requirements of Section V.F.5 Mid-Term and End-Term Reports, the Partnership is submitting this report as the End-Term Report – which also serves as the Annual Report. While this report includes a cumulative summary of activities conducted (per the 2009 SQIP and 2-year Work Plans) and monitoring data, the progress and effectiveness reporting requirements will not be applicable until the final SQIP has been approved by the Regional Water Board. The March 2013 Long Term Effectiveness Assessment is available for a detailed assessment of the effectiveness of the activities currently being performed.

**Fiscal Analysis**

Table RPM – 1 below presents an estimated summary of the expenditures incurred during the End-Term Report period and the proposed 2021/2022 budget related to the regional activities of the Partnership. The Fiscal Summary does not include permittee staff costs. See the permittee-specific annual reports for the fiscal summaries for each individual agency, their funding source and the legal restricts of those sources.

**Table RPM-1 Fiscal Summary**

	2019/2020 Expenditures (\$)	2020/2021 Expenditures (\$)	2021/2022 Budget (\$)
<b>Regional Programs</b>			
Monitoring Program/Special Studies/Target Pollutant Program	829,784	477,049	948,353
Regional Public Outreach Program	180,504	305,900	306,000
Regional Commercial/Industrial Program	0	0	0
Program Management	0	0	50,000
<b>Total</b>	<b>1,010,289</b>	<b>782,949</b>	<b>1,304,353</b>

Table RPM-2 below presents a summary of the joint authorizations that were executed during the End-Term Report period for regional activities and the expenditures during the reporting period.

**Table RPM-2 Joint Authorization Summary**

Joint Authorization Number	Project Name	Budget Amount (\$)	Expenditures thru June 30, 2021
	<b><u>Monitoring</u></b>		
FY19-MP-01	Stormwater Monitoring – LWA costs incurred in FY 20	753,137	208,098
FY20-MP-01A	Stormwater Monitoring – FY 19/20 LWA Services Agreement	574,192	457,887
FY20-MP-02	Delta Regional Monitoring Program FY 19/20 contribution	103,000	103,000
FY21-MP-01A	Stormwater Monitoring – FY 20/21 LWA Services Agreement	855,107	325,899
FY21-MP-02	Delta Regional Monitoring Program FY 20/21 contribution	103,000	103,000
	<b><u>Target Pollutants</u></b>		
FY20-TP-01	CASQA Pesticides Reduction Project FY 19/20	35,000	35,000
FY20-TP-02	Pesticides Regulatory Assistance FY19/20	27,000	27,798
FY21-TP-01	CASQA Pesticides Reduction Project FY 20/21	35,000	35,000
FY21-TP-02	Pesticides Regulatory Assistance FY20/21	29,000	13,150
	<b><u>Public Outreach</u></b>		
FY19-PO-06	Media Placement FY 19/20	68,000	32,005
FY20-PO-01	ReScape CA Promotion of River Friendly Landscaping	100,000	97,500
FY20-PO-03	Splash in the Class - Classroom Presentations	41,400	37,570
FY20-PO-04	IPM - OWOW Consultants and Supplies	40,000	13,428
FY21-PO-01	ReScape CA Promotion of River Friendly Landscaping	104,000	101,049
FY21-PO-02	Stormwater Outreach/Media Placement	75,200	70,178
FY21-PO-03	Trash/Litter Outreach	40,000	40,000
FY21-PO-04	IPM – OWOW Consultants and Supplies	40,000	27,064
FY21-PO-05	Splash in the Class – Classroom Presentations	46,322	43,164
FY21-PO-06	Follow-up Quantitative Research Study to SSQP Survey	24,920	24,443

## Element Effectiveness Assessment

On October 1, 2016, the Regional Water Board's General Permit for Discharges from Municipal Separate Storm Sewer Systems (MS4 General Permit) became effective. The MS4 General Permit requires the compilation of a Priority Water Quality Constituent (PWQC) list, a Reasonable Assurance Analysis (RAA); and after approval of the list and RAA, a revision to the SQIP (and work plans) to address the PWQCs. A revised SQIP was not yet required during the End-Term Report period. Therefore the Partnership continues to implement the 2009

SQIP and its associated work plans. For the tasks being performed, the overall effectiveness of the SQIP and the individual Elements in reducing stormwater pollution to the maximum extent practicable, achieving compliance with water quality standards in receiving waters, and meeting performance standards was provided in the Long Term Effectiveness Assessment (LTEA) submitted to the Regional Water Board on March 15, 2013.

## **Assessment Summary and Proposed Element Changes**

### **Work Plan Tasks Completion Summary**

All tasks were completed per the 2-Year Work Plan.

### **Revisions and changes to the work plan and/or SQIP**

The SQIP will be updated in accordance with the MS4 General Permit and the associated schedule of deliverables. A 5-Year Work Plan will be submitted with the updated SQIP. There are no changes recommended during the interim. The Partnership's 2021/2022 and 2022/2023 Regional Work Plans are included in Appendix Intro-1.

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# Regional Monitoring and Target Pollutant Program

## Introduction

The Sacramento Stormwater Quality Partnership (Partnership) Permittees work jointly to conduct the Monitoring and Target Pollutant programs to comply with the requirements of the MS4 General Permit. The MS4 General Permit requires ongoing implementation of the Permittees' 2009 SQIP and the associated annual Work Plans. The Partnership submitted a 3-year Work Plan (2016-2019) in November 2016 with its Notice of Intent (for coverage under the MS4 General Permit) to augment the 2009 SQIP annual work plan. A subsequent 2019/2020 and 2020/2021 Work Plan was submitted in November 2019 to extend the planning period until a new SQIP is approved by the Regional Water Board.

The MS4 General Permit's "Stormwater Management Framework" requirements include six steps that rely on water quality monitoring data and technical assessments. These steps include the following efforts: 1) assessment of constituents and surface water impairments, 2) prioritization of water quality constituents, 3) development of strategies and milestones, 4) implementation of strategies and programs, 5) effectiveness assessment based on milestones, and 6) adaptive management to optimize resource allocations for water quality benefit.

The MS4 General Permit allows for a "pollutant prioritization approach" such that specific monitoring requirements are not prescribed but are developed and approved to address priorities. The Partnership's pollutant prioritization assessment was completed in the 2016/2017 fiscal year when the Partnership identified priority water quality constituents (PWQCs), as described in the *Assessment and Prioritization Results and Reasonable Assurance Analysis Methodology Report*. The Target Pollutant Program has been the Partnership's ongoing management effort to identify, prioritize, and improve water quality impacts related to Permittee urban runoff discharges. The Target Pollutant Program was adapted and combined with the Monitoring Program to conform to the requirements of the current MS4 General Permit, forming the basis of the Partnership's pollutant prioritization approach, while maintaining continuity with Partnership historical efforts to focus on key pollutants.

In the 2018/2019 fiscal year, the Partnership prepared a supplemental report in response to comments from the Regional Water Board on the 2016/2017 fiscal year prioritization report and the approach to the Reasonable Assurance Analysis (RAA). The *Supplemental Report for the Assessment and Prioritization of Water Quality Constituents and Reasonable Assurance Approach* included additional data summaries and requested revisions. During the 2018/2019 fiscal year, the Partnership prepared the RAA report which was submitted at the beginning of the 2019/2020 fiscal year.

The Partnership utilizes monitoring data as part of the Stormwater Management Framework to achieve the following objectives:

- Assess water quality in urban runoff and receiving waters (rivers and creeks) and identify potential problems.
- Identify pollutants and assist in identifying key pollutant sources.
- Investigate observed and reported problems in local waterways and assist in identifying sources of the problems.
- Evaluate the effectiveness of selected Best Management Practices (BMPs) and control measures.
- Assess the effectiveness of the overall Partnership Program by tracking water quality changes and evaluating trends over time.
- Adjust future monitoring efforts to provide the most useful data in the most cost-effective manner.

Table MP-1 summarizes Partnership monitoring activities conducted during 2016/2017 through 2020/2021 fiscal years, which included participation in the Delta Regional Monitoring Program (RMP) and urban runoff monitoring performed by the Partnership since the Mid-Term Report. Additionally, the Partnership prepared the *2021 Cumulative Monitoring Report* (Appendix MP-1) that summarizes monitoring data to comply with the MS4 General Permit, including Attachment G, and supports ongoing monitoring management and planning activities.

Receiving water river monitoring was not required because the Partnership chose to participate in the Delta RMP, as approved in the August 3, 2015 letter from the Regional Water Board<sup>1</sup> (Appendix MP-2). The letter specifies monitoring at the urban tributaries as “*Long Term Monitoring beginning 1 August 2015: Once every five years, sample existing urban tributaries for 3 wet, 1 dry event for Table B constituents*”. The Partnership interprets this sample collection frequency as three wet events and one dry event in the July 2015 – June 2020 period and subsequent five year periods until monitoring changes are approved or otherwise modified by the Regional Water Board.

The *Delta RMP Quality Assurance Program Plan* describes sample collection and reporting protocols and finalized data are available in the California Environmental Data Exchange Network (CEDEN)<sup>2</sup>. The Partnership collected water quality samples during fiscal year 2020/2021 at the monitoring stations as shown on the map in Figure MP-1.

Samples are collected and validated according to the Partnership’s *Quality Assurance Project Plan (QAPP)*, included as Appendix MP-3. Site specific sampling procedures are specified in the Partnership’s *Sampling and Analysis Plan (SAP)* for each type of Partnership monitoring, which is included as an attachment to the QAPP. Until CEDEN (receiving water data) and the Stormwater Multiple Application and Report Tracking System (SMARTS, urban runoff data) databases are updated to allow Partnership submittals directly, the Partnership will provide CEDEN-compatible data to the Regional Water Board as a spreadsheet (Appendix MP-4).<sup>3</sup>

**Table MP-1 Summary of 2016/2017 through 2020/2021 Monitoring Year Events**

Monitoring Period	River	Urban Tributary	Urban Runoff Discharge
2016/2017	[1]	[2]	3 Wet, 1 Dry [3]
2017/2018		3 Wet, 1 Dry [4]	3 Wet, 1 Dry
2018/2019		[2]	3 Wet, 1 Dry
2019/2020		[2]	[5]
2020/2021		[2]	4 Wet, 1 Dry [6]

Notes:

[1] River sampling was not required due to participation in the Delta RMP.

[2] Not required. Sample collection at each urban tributary site is only required once every five years based on the August 2015 approval letter communication (Creedon, 2015) attached in Appendix MP-2.

[3] Fiscal year 2016/2017 monitoring was a make-up event for the Continuous Sensor Pilot Study based on the August 2015 approval letter from the Regional Water Board.

[4] Willow Creek and Laguna Creek monitoring sites only. Sample collection at Arcade Creek was previously conducted in the 2015/2016 fiscal year consistent with the August 2015 requirement to perform three wet weather and one dry weather sample collection events in the July 2015 – July 2020 period.

[5] Not required in fiscal year 2019/2020. Sample collection at each urban runoff discharge site is conducted two years on and one year off.

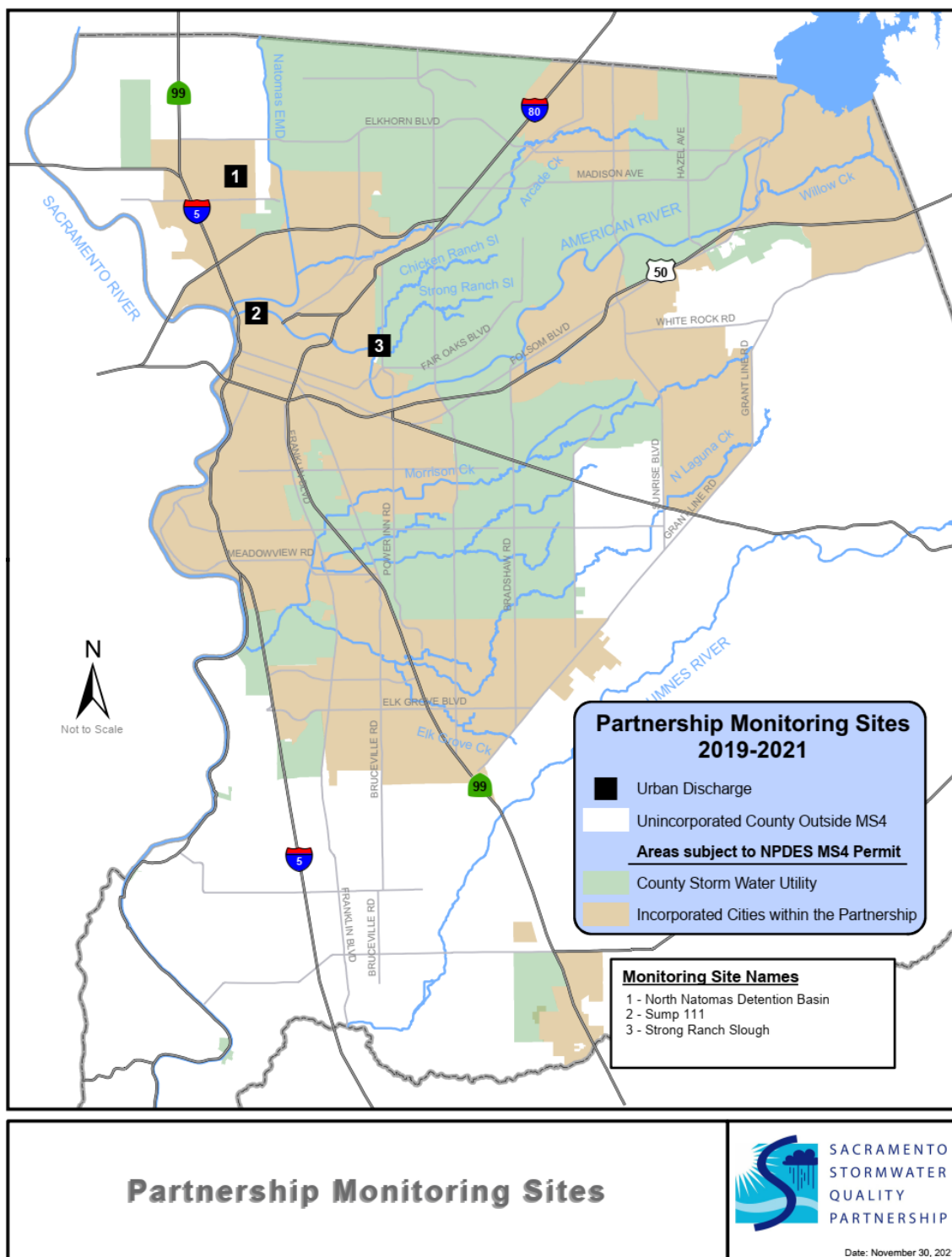
[6] The fourth wet weather event was performed to capture three events at each of the locations. Insufficient discharge flow was observed at the North Natomas Basin No. 4 monitoring site during the second event and sample collection was not possible.

<sup>1</sup> Pamela Creedon. Central Valley Regional Water Quality Control Board. Letter Communication to the Sacramento Stormwater Quality Partnership regarding *Approval to Allow the Sacramento Area Stormwater Agencies to Reduce Local Water Quality Monitoring and Participate in the Delta Regional Monitoring Program*. August 3, 2015.

<sup>2</sup> <http://ceden.org/>

<sup>3</sup> The Regional Water Board will need to coordinate with the Surface Water Ambient Monitoring Program (SWAMP) at the State Water Resources Control Board to update CEDEN.

Figure MP-1 2019-2021 Partnership Monitoring Sites





## Activities

All activities required by the MS4 General Permit, 2009 SQIP, and the 2019/2020 and 2020/2021 2-Year Work Plan were completed. The section numbers below reflect the chapters outlined in the 2009 SQIP and the task numbers are from the extended 2019/2020 and 2020/2021 2-Year Work Plan.

### MP.1 Receiving Water Monitoring

**MP.1.1 Maintain adequate participation in the Delta Regional Monitoring Program (RMP) receiving water monitoring activities in lieu of monitoring of river receiving waters at American River at Nimbus, American River at Discovery Park, Sacramento River at Veteran's Bridge, and Sacramento River at Freeport Bridge**

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment J, B.6, B.7, Page J-20	↔	↔	↔

**MP.1.2 Maintain adequate participation in the Delta Regional Monitoring Program (RMP) receiving water monitoring activities in lieu of annual monitoring of urban tributary receiving waters at Arcade Creek, Willow Creek, and Laguna Creek**

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment J, B.6, B.7, Page J-20	↔	↔	↔

#### Summary of Work Completed (MP.1.1 and MP.1.2)

The Partnership participates in the Delta RMP through direct funding as well as membership in the Steering Committee, Technical Advisory Committee, and the newly formed corporate Board of Directors. Delta RMP activities and accomplishments are reported through data and status reports that are posted to the Delta RMP webpage<sup>4</sup> as work products or as part of meeting proceedings. Beginning in the 2020/2021 fiscal year, the Delta RMP organization changed from a collaborative program implemented by the Aquatic Science Center to a State of California registered non-profit corporation (also named Delta Regional Monitoring Program), which implements the program work plans directly. The corporation Board of Directors has ultimate authority over all corporate decisions and agreements and has authorized a Steering Committee and technical advisory committees to provide programmatic and technical recommendations and direction.

The Delta RMP's 2019/2020 and 2020/2021 monitoring and data annual summaries are included as Appendix MP-5 as a summary of 2019/2020 and 2020/2021 fiscal year activities. The Delta RMP reports data to the CEDEN or other publicly accessible platforms. Delta RMP activities are approved annually by the Steering Committee to ensure adequate funding and to address program priorities. The *Technical Workplan and Budget of the 2021-2022 Fiscal Year* was considered by the Steering Committee on July 29, 2021, and adopted by the Board of Directors on July 29, 2021<sup>5</sup>. The Regional Water Board Executive Officer approved the Partnership's participation in the Delta RMP in-lieu of certain individual receiving water monitoring per the August 3, 2015 approval letter from the Regional Water Board (Appendix MP-2).

<sup>4</sup> <https://deltarmp.org/>

<sup>5</sup> [https://deltarmp.org/Documents/Delta%20RMP%20FY21-22%20Final%20Workplan\\_21\\_0729\\_wappendices.pdf](https://deltarmp.org/Documents/Delta%20RMP%20FY21-22%20Final%20Workplan_21_0729_wappendices.pdf)

**MP.1.3 Conduct urban tributary monitoring at Arcade Creek, Willow Creek, and Laguna Creek<sup>1</sup>**

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment J, B.5.a, Page J-18			

**Summary of Work Completed**

Monitoring at Arcade Creek, Willow Creek, and Laguna Creek is only required once every five year period based on the August 3, 2015 approval letter from the Regional Water Board (i.e., one year of monitoring per five-year period beginning in the 2015/2016 fiscal year). The Partnership collected samples at Arcade Creek during the 2015/2016 fiscal year and at Willow Creek and Laguna Creek during the 2017/2018 fiscal year. Monitoring was not required nor conducted at any of the urban tributary locations during the 2019/2020 and 2020/2021 fiscal years. The *2021 Cumulative Monitoring Report* (Appendix MP-1) summarizes data collected in urban tributaries at the current monitoring locations for the historical data period.

**MP.2 Urban Runoff (Discharge) Monitoring****MP.2.1 Conduct urban runoff monitoring at Sump 111, Strong Ranch Slough, and the North Natomas Detention Basin No. 4 (Sump 14)**

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment J, B.5.c, Page J-18	↔		↔

**Summary of Work Completed**

Monitoring at Sump 111, Strong Ranch Slough, and North Natomas Detention Basin No. 4 (Sump 14) urban runoff (discharge) monitoring sites is required during two out of three years. The Partnership conducted urban runoff (discharge) monitoring in fiscal year 2020/2021. The Partnership collected urban runoff water column composite and grab samples for the constituents listed in Table B of the 2015 Limited Term NPDES permit Monitoring and Reporting Program (MRP) requirements at the three urban runoff locations (see Figure MP-1 and Table MP-2). Samples were collected at each site for one dry weather event and three wet weather events (Table MP-2). A fourth event was necessary to collect three events at the North Natomas Detention Basin No. 4 which had minimal discharge during the second wet weather event at the other locations. A complete report of all monitoring events and activities, including analytical results, is included in the *2020/2021 Urban Runoff Discharge Annual Monitoring Report Parts 1 and 2* (Appendix MP-6, Part 2. Appendix E includes all lab reports). The *2021 Cumulative Monitoring Report* (Appendix MP-1) includes time series plots for constituents to visually identify apparent trends or significant year-to-year changes that may require additional investigation. Site specific sampling procedures are specified in the SAP, which is an attachment to the QAPP (Appendix MP-3). Electronic monitoring data are submitted to the Regional Water Board as Appendix MP-4 (in spreadsheet format) until the Regional Water Board notifies the Partnership that direct submittal of urban runoff discharge monitoring data to SMARTS is available.

**Table MP-2 Summary of 2020/2021 Urban Runoff Discharge Monitoring Events**

Event Period	Event Type	Strong Ranch Slough	North Natomas Detention Basin No. 4	Sump 111
11/17-18/2020	Wet	■	■	■
1/4/2021	Wet	■	[1]	■
1/26-27/2021	Wet	■	■	■
2/11-12/2021	Wet	[2]	■	[2]
5/11-12/2021	Dry	■	■	■

Notes: ■ = sampling event completed

[1] Insufficient rainfall and discharge flow at this monitoring site.

[2] Not required. Event was only conducted at North Natomas Detention Basin No. 4 because there was insufficient discharge during the 1/4/2021 monitoring event to successfully collect samples.

### MP.3 Attachment G TMDL Compliance

#### MP.3.1 Implement Delta Methylmercury TMDL Final Control Study Work Plan

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment G, J-B.5.e	◆		

#### Summary of Work Completed

The Partnership meets the following requirements of the Delta Methylmercury TMDL requirements as specified in Attachment G of the MS4 General Permit:

1. The Partnership implements BMPs to control erosion and sediment discharges with the goal of reducing mercury discharges.
2. The Partnership submitted its *TMDL Phase 1 Implementation: Final Methylmercury Feasibility Report* on October 19, 2018, to satisfy the Control Study Work Plan. The *Final Methylmercury Feasibility Report* summarized the findings of methylmercury removal observed at multiple locations where low impact development (LID) features were implemented and evaluated methylmercury loading from the “jurisdictional runoff area” within the TMDL area. The evaluation determined that the Partnership complies with its TMDL wasteload allocation without consideration of future controls. Additionally, LID was found to be an effective control based on observed flow and concentration reductions at the Citrus Heights City Hall (Police Station) site and the nearly complete onsite infiltration at the Sylvan Community Center site. The Regional Water Board provided comments on the Partnership’s October 2015 Progress Report on March 12, 2018, after the field activities had concluded. Comments on the *Final Methylmercury Feasibility Report* were received in early 2019/2020 fiscal year for consideration during TMDL Phase 2 Implementation. The Regional Water Board approved the *Final Methylmercury Feasibility Report* on August 17, 2021, and confirmed that the Partnership fulfilled the Phase 1 Control Study final reporting requirements.
3. The Partnership requires new development to meet the requirements of the *Sacramento Region Stormwater Quality Design Manual* (July 2018) and has begun documenting acres treated by LID features as of 2018/2019 fiscal year as presented in Section MP.5.7. Implementation of LID features was shown to be an effective methylmercury management practice in the large MS4 Phase I control studies.
4. The Partnership will implement Phase 2 of the Delta Mercury Control Program once Phase 2 begins.
5. The Partnership participated in the Delta Mercury Exposure Reduction Program through financial contributions while the program was active until 2020.
6. The Partnership documents compliance with the erosion and sediment control requirements in this end-term report through implementation of the Sediment Control Work Plan as described in Section MP.6.1. The Partnership has not yet received comments on the RAA, therefore, a revised SQIP was not yet required during the End-Term Report period. In addition, the program effectiveness assessment requirement per the MS4 General Permit Part V.E.5 will not be conducted until the RAA and subsequent SQIP are approved by the Regional Water Board.

7. The Partnership documents implementation of all methylmercury controls or BMPs in this end-term report, such as the implementation of the Mercury Plan described in Section MP.6.3.
8. The Partnership meets the monitoring provision requirement to show progress towards attainment of the waste load allocation in this End-Term Report. The *2021 Cumulative Monitoring Report* (Appendix MP-1) includes updated methylmercury load assessments for the Jurisdictional Runoff Area and comparisons of LID urban runoff concentrations. Progress of LID implementation is summarized in Section MP.5.7.

## MP.4 Annual Report

### MP.4.1 Submit annual monitoring data as a part of the Partnership Regional Activities Annual Report

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.F.4.c	◆		◆

#### Summary of Work Completed

The monitoring data is attached as *2020/2021 Urban Runoff Discharge Annual Monitoring Report* (Appendix MP-6, Part 1 and 2).

## MP.5 Implementation of the Water Quality Framework

The Partnership submitted deliverables in previous years to satisfy the requirements of the MS4 General Permit Water Quality Framework:

- The Partnership submitted the *Preliminary Prioritization Approach Report* on November 1, 2016, as part of the Notice of Intent for coverage by the MS4 General Permit. The Regional Water Board provided a Notice of Applicability for the Partnership's MS4 agencies on November 23, 2016.
- The Partnership submitted the *Assessment and Prioritization Results and Reasonable Assurance Analysis (RAA) Methodology Report* on May 30, 2017. The Regional Water Board provided comments on July 2, 2018, which set the deadline for the RAA, including milestones, to be July 2, 2019, and required a Supplemental Report. The Partnership submitted the Supplemental Report on October 2, 2018, that included additional data summaries and the requested revisions.
- The Partnership submitted the RAA Report, including milestones, on July 1, 2019. The Partnership's RAA included evaluations and milestones for all PWQCs. The milestones will become effective following approval of the SQIP by the Regional Water Board.
- Partnership permittees individually submitted responses to the California Water Code Section 13383 Order to Submit Method to Comply with Statewide Trash Provisions identifying the Permittee's selected compliance option of Track 1 or Track 2 by September 1, 2017. Partnership permittees that selected the Track 2 compliance option submitted Trash Implementation Plans by December 1, 2018. After the RAA and/or the Trash Implementation Plans are approved, the proposed schedules within each Permittee's Implementation Plan will be incorporated into future work plans and Mid-Term and End-Term Reports.

### MP.5.5 Participate in relevant TMDL, 303(d), and Policy development that may require monitoring or sets requirements for potential Priority Water Quality Constituents

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E	↔	↔	↔

#### Summary of Work Completed

In 2018/2019 and 2019/2020 fiscal years, the Partnership actively participated in the Central Valley Pyrethroid TMDL stakeholder workshops, Delta Methylmercury stakeholder groups, the Lower American River Sources of

Bacteria Study, and Urban Pesticide Amendments. Participation in these work efforts includes development of technical programs to address Basin Plan amendments or other programs. The Partnership coordinates these efforts with MS4 General Permit requirements and assessments.

### Central Valley Pyrethroid TMDL

The Regional Water Board adopted revisions to the Basin Plan on June 8, 2017, to incorporate a control program for pyrethroids in the Central Valley, including the Partnership's Jurisdictional Runoff Area. The Partnership has ongoing activities to comply with the Basin Plan requirements as described in Sections MP.5.7 and MP.6.2.

### Delta Methylmercury TMDL

The Partnership previously participated in the planning committee with the Regional Water Board for the Delta Science Program facilitated independent scientific review to establish the review questions and review panel composition for review of the Delta Methylmercury TMDL Phase 1 Control Studies. On September 10, 2020, the Partnership presented an overview of the Partnership's Delta Methylmercury TMDL Phase 1 Control Study in the Delta Methylmercury Stakeholder Workshop for Control Study Entities that was hosted by the Regional Water Board.<sup>6</sup> The Regional Water Board is considering the findings of independent scientific review to develop any amendments to the Basin Plan for Phase 2. The Partnership plans to participate in stakeholder processes to support Phase 2 program development.

### Lower American River Sources of Bacteria Study

The Lower American River, which flows west from the Nimbus Dam to the confluence of the American and Sacramento Rivers, is listed as impaired for recreational uses based on *E. coli* concentrations observed during dry weather. The Regional Water Board led a stakeholder effort, which included participation from the Partnership, Sacramento Regional County Sanitation District, Sacramento Area Sewer District, and Sacramento County Regional Parks to develop an assessment work plan to identify sources of bacteria during dry weather. The study activities and planning are summarized in Section MP.5.8.

### Urban Pesticide Amendments

A Partnership representative is active through California Stormwater Quality Association (CASQA) as a stakeholder in the State Water Resources Control Board process for developing the Urban Pesticide Amendments. If adopted, these amendments to the Inland Surface Waters, Enclosed Bays, and Estuaries (ISWEBE) Plan would provide statewide consistency for regulatory and implementation programs for control of pesticides in receiving waters.

#### MP.5.7 Implement Category 1 Priority Water Quality Constituents' Plans or Studies, as needed.

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.1		↔◆	↔

### Summary of Work Completed

The Partnership developed implementation timelines in the RAA that will initiate when they are approved through the revised SQIP. However, in the interim period, the Partnership continues to develop the Monitoring Study Design, including identification of special studies, and has implemented a survey tool to track implementation of LID projects implemented per the *2018 Stormwater Quality Design Manual*.

### Methylmercury

The Partnership surveyed Permittees to compile acreage treated by LID features implemented for applicable land development (new and retrofit) projects and potential methylmercury removed by the projects. Table MP-

<sup>6</sup> [https://www.waterboards.ca.gov/rwqcb5/water\\_issues/tmdl/central\\_valley\\_projects/delta\\_hg/dmcp\\_csw\\_20200910ag.pdf](https://www.waterboards.ca.gov/rwqcb5/water_issues/tmdl/central_valley_projects/delta_hg/dmcp_csw_20200910ag.pdf)

3 summarizes the responses received to date. This first use of the tracking tool is intended as a pilot program that may be refined or revised at a later date when the approach is implemented in the next SQIP, once approved by the Regional Water Board. The tracking tool will be evaluated as a primary means of assessing the effectiveness of control measures and compliance with the methylmercury wasteload allocation.

**Table MP-3 Completed Projects with Low Impact Development Control Measures as Reported by June 30, 2021**

Primary LID Control Measure	Completed Projects with LID Measures	
	Number	Treated Acres [1]
Amended Soil or Mulch Bed	4	16
Bioretention BMP	22	89
Disconnected Pavement	1	1
Disconnected Roof Drains	2	1
Infiltration BMP	2	3
Porous Pavement or Alternative Driveway	1	1
<b>Total</b>	<b>32</b>	<b>112</b>

Note: [1] Rounded to nearest acre.

### Pyrethroids

On April 21, 2020, the Partnership submitted the *Pyrethroid Management Plan and Baseline Monitoring Report* to comply with the requirements established by the Amendment to the Basin Plan (Resolution R5-2017-0057, Pyrethroid Basin Plan Amendment). These documents were submitted to satisfy the management planning and baseline data demonstration required for receiving waters both listed and not listed as impaired due to pyrethroid pesticides. The Regional Water Board approved the Baseline Monitoring Report on July 30, 2019. The Regional Water Board submitted comments on the *Pyrethroid Management Plan* on September 17, 2020. The Partnership revised and resubmitted the *Pyrethroid Management Plan* to address the Regional Water Board's comments on October 30, 2020. The *Regional Water Board* approved the revised October 2020 Pyrethroid Management Plan on March 4, 2021.

There were no additional pyrethroid special studies besides the characterization monitoring summarized in Section MP.2.1 and the Appendix MP-1 *2021 Cumulative Monitoring Report*. Additional studies are under consideration through the Monitoring Study Design process that will be incorporated into the next SQIP, when approved. The Partnership will begin implementing the October 2020 *Pyrethroid Management Plan* in the 2021/2022 fiscal year as described in Section MP.6.2.

### Trash

Individual Partnership agencies implement trash management plans and studies and may report any interim activities in their individual annual reports. However, until the RAA and/or the Trash Implementation Plans are approved, there are no work plan or end-term reporting requirements related to trash.

The Partnership prepared a white paper "Track 2 Implementation Options for Complying with the Statewide Trash Amendments" that evaluated possible compliance pathways using institutional controls, specifically trash clean-ups, in receiving waters. The proposed approaches were submitted to the Regional Water Board, but the compliance approaches were not approved following additional consultation with the State Water Resources Control Board.

### Legacy Organophosphate Pesticides

The Partnership has continued to demonstrate compliance with diazinon and chlorpyrifos TMDL targets and no new actions are necessary. These constituents will remain as Category 1 PWQCs until they are removed from the impairment listings. The recent monitoring data for diazinon and chlorpyrifos is summarized in the Appendix MP-1 *2021 Cumulative Monitoring Report*. Data collected during the current permit term for both diazinon and chlorpyrifos are below the waste load allocation.

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**MP.5.8 Implement Category 2 Priority Water Quality Constituents' plans or studies, as needed: Currently includes participation in the Phase 1 Lower American Sources of Bacteria Study being conducted by the Regional Water Board, Sacramento Partnership, Regional San, and Sacramento County Parks.**

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PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.1		↔	↔

### Summary of Work Completed

The Lower American River is listed as impaired for recreational uses based on *E. coli* concentrations observed during dry weather. The Regional Water Board, Sacramento Regional County Sanitation District (Regional San), Partnership, and Sacramento County Regional Parks (collectively "Stakeholder Group") completed field data collection according to the Phase 1 work plans (Appendix MP-8 Part 1 and Part 2) of a study to identify the sources of fecal pollution to the Lower American River during dry weather.

Phase I of this source tracking study focused on the 3-mile reach from Paradise Beach to Sutter's Landing and was performed during dry weather from August 2019 through September 2019 and June 2020 through September 2020. The Partnership submitted a progress report on the activities and work plan completion (Appendix MP-9) to the Confluence Grant administrator (Regional San). The Regional Water Board prepared a summary of the Phase 1 results (Appendix MP-10). Monitoring results for Phase I of the Lower American River Bacteria Study indicate most sample locations generally meet the statewide bacteria water quality objectives. The exception to this finding was at the north bank at Sutter's Landing with 73% of samples exceeding the bacteria objective (six week geometric mean of 100 MPN/100mL). Microbial source tracking (MST) analyses on a subset of samples with detected *E. coli* indicate that birds are the largest and most consistent source of contamination in this section of the river.

The Stakeholder Group prepared a work plan to complete Phase 2 of the study from Sutter's Landing to the confluence with the Sacramento River and finalized a sampling plan in June 2021 for sample collection starting in July 2021 (Appendix MP-11).

## MP.6 Historical Target Pollutant Activities

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**MP.6.1 Implement Sediment Control Work Plan**

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PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment NA	↔	↔	↔

### Summary of Work Completed

The Partnership continued to conduct the following activities to control sediment and erosion during the 2019/2020 and 2020/2021 fiscal years, as identified in the Sediment Strategy completed in September 2012:

- Implementation of stormwater quality development standards for new and redevelopment projects to reduce the amount of sediment and other pollutants discharged to receiving waters under the New Development Element.
- Enforcement of ordinances and standards to reduce erosion at construction sites implemented under the Construction Element.
- Implementation of operational BMPs under the Municipal Operations Element which remove sediment, such as street sweeping and maintenance of detention basins, storm drains and inlets, sumps, and channels.

- Operation and maintenance of stormwater quality treatment facilities required for new and redevelopment projects under the New Development Element and/or the Municipal Operations Element, such as wet basins, dry basins, and underground vaults.
- Inspection, complaint response, and enforcement activities conducted under the Commercial/Industrial and Illicit Discharge elements to identify and eliminate sources of sediments and associated pollutants from industrial, commercial, and residential sources.

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**MP.6.2 Implement Pesticide Plan**


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PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment NA	↔	↔	↔

**Summary of Work Completed**

The Partnership continued activities to address pesticide use, consistent with the Pesticide Plan, in the 2019/2020 and 2020/2021 fiscal years.

BMPs implemented jointly by the Partnership include the following:

- Integrated pest management (IPM) outreach and education programs, such as the Rescape and Our Water Our World, as described in Sections PO.3.5 and PO.5.4.
- Inclusion of IPM messaging in the stormwater media campaign, as described in Section PO.3.3.
- Encouragement of IPM in landscaping through support of River Friendly Landscaping principles, as described in Section PO.5.3.
- Promotion of IPM implementation by licensed structural pest control operators (PCO), through Partnership staff participation in GreenPro Certified and California Structural Pest Control Board.
- Water quality monitoring.
- Tracking of relevant monitoring programs by other agencies, such as the State Water Resources Control Board's SWAMP and Department of Pesticide Regulation (DPR)'s Environmental Monitoring Branch.
- Participation in the development of Urban Pesticides Amendments by the State Water Resources Control Board, primarily through CASQA (included as Appendix MP-7).
- Tracking and commenting on state and federal regulatory activities that pertain to pesticides of significance to urban stormwater discharges, primarily through CASQA.

The Regional Water Board approved the Partnership's Pyrethroid Management Plan on March 4, 2021. Starting in the 2021/2022 fiscal year, the Partnership will begin implementation of the Pyrethroid Management Plan in place of the former Pesticide Plan.

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**MP.6.3 Implement Mercury Plan**


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PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment NA	↔	↔	↔

**Summary of Work Completed**

The Partnership continued to implement the Mercury Plan during the 2019/2020 and 2020/2021 fiscal years. Mercury control activities include the following as needed by the individual Permittees:



- Sediment and erosion control BMPs.
- Commercial/industrial inspections.
- Support of household hazardous waste (HHW) mercury reduction programs.
- Posting of mercury reduction information on websites for the Partnership and Be Mercury Free, a joint project started between the Partnership and the Sacramento Regional County Sanitation District.
- Submittal of the final Methylmercury Control Study Report as required under the Delta Methylmercury TMDL.
- Participation in the Delta Tributary Mercury Council (DTMC) on mercury watershed programs. LWA participated on behalf of the Partnership during the meeting on May 19, 2021.

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**MP.6.4 Implement Metals Reduction Plan**


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PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment NA	↔	↔	↔

**Summary of Work Completed**

During the 2019/2020 and 2020/2021 fiscal years, the Partnership continued to address metals reduction primarily through sediment reduction, as outlined in Section MP.6.1 above, and through implementation of California Senate Bill 346, which was passed to reduce copper content of brake pads.

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**MP.6.5 Implement Fecal Waste Reduction Strategy**


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PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment NA	↔	↔	↔

**Summary of Work Completed**

The Partnership continued to implement the Fecal Waste Reduction Strategy during the 2019/2020 and 2020/2021 fiscal years. The fecal waste reduction strategies include the following:

- Inspection of kennels for appropriate waste handling procedures.
- Support of practical alternatives to increase appropriate pet waste disposal and continue to prohibit discharges of pet waste into the MS4.
- Control of illicit discharges, cross connections, and sanitary sewer overflows.

**Element Effectiveness Assessment**

On October 1, 2016, the MS4 General Permit became effective. The MS4 General Permit requires the compilation of a Priority Water Quality Constituent (PWQC) list and a Reasonable Assurance Analysis (RAA); and after approval of the list and RAA, a revision to the SQIP (and work plans) to address the PWQCs. A revised SQIP was not yet required during the End-Term Report period. Therefore, the Partnership continues to implement the 2009 SQIP and its associated work plans. For the tasks being performed, the overall effectiveness of the SQIP and the individual Elements in reducing stormwater pollution to the maximum extent practicable, achieving compliance with water quality standards in receiving waters, and meeting performance standards was provided in the Long Term Effectiveness Assessment (LTEA) submitted to the Regional Water Board on March 15, 2013.

**Assessment Summary and Proposed Element Changes**

## **Work Plan Tasks Completion Summary**

All tasks were completed per the 2-Year Work Plan.

## **Revisions and changes to the work plan and/or SQIP**

The SQIP will be updated in accordance with the MS4 General Permit and the associated schedule of deliverables. A 5-Year Work Plan will be submitted with the updated SQIP. The Partnership updated the 2021/2022 and 2022/2023 Regional Work Plans to reflect that the Pesticide Plan has been replaced by the Pyrethroid Management Plan and the Partnership has included this as a new activity for Priority Water Quality Constituent activities (MP.7.1). The monitoring program and the remaining target pollutant activities will continue to be implemented consistent with the 2009 SQIP until the Regional Water Board approves the draft RAA and an updated SQIP. The Partnership's 2021/2022 and 2022/2023 Regional Work Plans are included in Appendix Intro-1.

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## Regional Public Outreach

### Introduction

The Sacramento Stormwater Quality Partnership (Partnership) conducts regional public outreach programs to educate the public about the harmful effects of stormwater pollution and to motivate people to prevent pollution. Furthermore, it provides opportunities for the public to participate in stewardship projects to improve the quality of urban runoff and protect local creeks and rivers. These programs are designed to comply with the *Public Involvement and Participation Program Element* requirements of the MS4 General Permit. The target audiences of the Public Outreach Element include the general public, schools, and businesses.

Public outreach activities are coordinated with other program element activities to ensure consistent and integrated messages. The Partnership maintains relationships with other groups and agencies to share ideas and experiences, and jointly implement outreach where mutually beneficial opportunities exist. Many of the Partnership's outreach activities are conducted regionally, as a collaborative effort among the permittees to prevent duplication, share resources and reach a broader segment of the population. In general, collaborative, county-wide efforts can be more cost-effective; however, in some cases, localized public outreach by individual permittees is more appropriate or cost-effective. This section describes the Partnership's regional activities. Permittee-specific activities conducted in addition to regional activities are described in each Permittee's End-Term Report that is being submitted separately by each Permittee.

### Activities

All activities required by the MS4 General Permit, 2009 SQIP and the 2-Year Work Plans (2019-2021) were completed. The section numbers reflect the chapters outlined in the 2009 SQIP and the task numbers are from the 2-Year Work Plan (2019-2021).

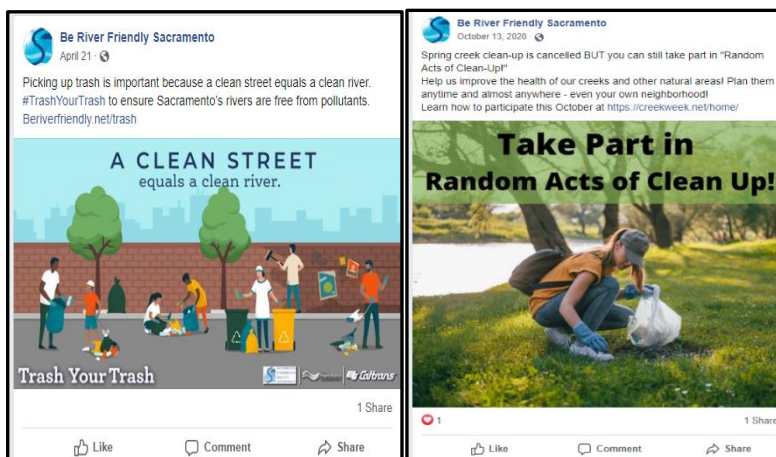
#### PO.1 Public Participation

##### PO.1.1 Participate in clean up events

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 & 4, Att. J	↔	↔	↔

##### Summary of Work Completed

The Partnership supports and participates in Creek Week which is an area-wide volunteer creek clean up that takes place every April. Due to COVID-19 public health reasons, the annual Creek Week event that was originally planned for April 2020 and April 2021 was cancelled. Although the events were cancelled, the Partnership continued to support the Creek Committee's "Random Acts of Clean Up" which encourages the public to stay involved by taking simple actions at home to protect creeks and rivers. In addition, the Partnership utilized social media channels such as Facebook to remind residents to place their trash in the garbage and to partner with groups on community clean ups. The Partnership developed a community clean up tool kit to help



neighborhood groups, schools, and other volunteers organize clean up events (see Appendix PO-1). For more information on trash outreach, see PO.3.3.

### PO.1.2 Maintain pet waste reduction programs such as "Scoop the Poop"

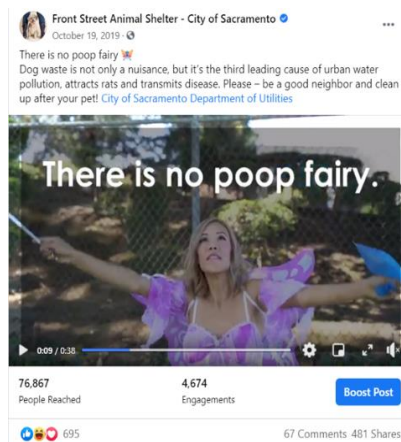
PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 & 4, Att. J	↔	↔	↔

#### Summary of Work Completed

During the End-Term Report Period, the Partnership continued to promote messages and programs that encourage proper pet waste disposal. The Partnership continued to support the mission of the "Scoop the Poop" message which aims to reduce the improper disposal of pet waste including parks and trails. The Partnership partnered with a local animal shelter (Front Street Animal Shelter) to distribute pet waste bag dispenser key chains and promoted proper pet-poop disposal through the shelter's Facebook page, reaching a total number of 76,867 followers during the 2019/2020 fiscal year. To further promote the message, a commercial was developed and featured on Front Street's [Facebook page](#) and the Partnership's website [www.beriverfriendly.net](http://www.beriverfriendly.net). Below are several examples of pictures and social media messages that helped promote proper pet waste disposal.



The Partnership partnered with the Front Street Animal Shelter to promote proper pet poop disposal by distributing pet waste bag dispenser key chains and through Facebook.



The Partnership and Front Street Animal Shelter partnered on a video to demonstrate the importance of picking up after pets. The video was featured on the animal shelter's Facebook page and the Partnership's website.



During FY 19/20 and 20/21, several messages on the Be River Friendly Sacramento Facebook Page included topics such as pet waste.

### PO.1.3 Encourage the public to participate in watershed groups and their activities

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 & 4, Att. J	↔	↔	↔

#### Summary of Work Completed

The Partnership continued to be available to participate in activities that were sponsored, or conducted, by local watershed and environmental groups when requested, depending on available staff and resources. Potential

activities include sponsoring, attending and/or speaking at meetings and outreach events. Most recently, staff from the Partnership agencies have been actively engaged with the American River Basin Collaborative. This Collaborative is a stakeholder group that develops, coordinates, and tracks projects to improve water availability and ecological health of local watersheds, to reduce flood damage, and to support economic wellbeing of communities. During the End-Term reporting period, permittee staff attended virtual meetings to discuss trash cleanups and opportunities to collaborate on a more regional approach for dealing with trash.

## PO.2 Hotline

### PO.2.1 Maintain hotline number for illicit discharges

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 & 4, Att. J	↔	↔	↔

#### Summary of Work Completed

In addition to the 311 numbers maintained by several of the Permittees, the Partnership continued to maintain a hotline phone number (808-4H2O) in order to facilitate easy reporting of stormwater-related problems by the public (e.g., clogged drains, illicit discharges/connections, and faded inlet markers). The Partnership hotline is a 'phone tree' system that asks callers to select the jurisdictions in which the problem is located, and then forwards calls to the appropriate Permittee's direct contact number for follow-up action. The hotline numbers are publicized as follows:

- On the Partnership and individual Permittee websites
- On brochures and other outreach materials
- Storm drain inlet markers

## PO.3 Public Outreach Implementation

### PO.3.1 Update the public outreach strategy to account for changes in public awareness and behavior based on survey results (Task PO.3.9)

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 & 4, Att. J	↔		↔

#### Summary of Work Completed

No strategy update was scheduled during the 2019/2020 fiscal year. The Partnership continued to focus on behaviors related to pesticide/fertilizer use and trash/litter as part of the public outreach strategy. Past surveys have identified positive results in pesticide use and trash reduction, and the Partnership continued to make efforts to encourage Sacramento residents to use less toxic pest control and to properly dispose of trash. See PO.3.3 and PO.5.4 for more information on these activities.

During the 2020/2021 fiscal year, the Partnership continued to focus efforts on promoting integrated pest management (IPM) and trash reduction. In the Winter of 2021, the Partnership conducted a follow up public awareness survey. The previous survey was completed in 2018. The Partnership is currently considering some of the key findings to develop the media strategy for the 2021/2022 fiscal year. For instance, while steady progress has been made with getting Sacramento residents with a yard to reduce the use of pesticides and fertilizers, it also indicated that there is continued room for improvement. In addition, other areas of concern were proper disposal of household and hazardous waste (HHW), pet waste and trash/litter. As a result, the

Partnership will narrow in on these specific behaviors as part of its outreach strategy for the 2021/2022 fiscal year. For more details on the survey results, please see PO.3.9 and Appendix PO-2.

In addition, the Partnership continued to focus efforts on other key activities such as engaging with the public through social media, enhancing the Be River Friendly website and supporting the Our Water Our World program. See PO.3.3 and PO.3.5 for more information on these activities.

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**PO.3.2 Continue to provide brochures and promotional materials including languages other than English**

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PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 & 4, Att. J	↔	↔	↔

***Summary of Work Completed***

Educational brochures and materials (in English and other languages) were made available to the public at outreach events, workshops, the Partnership's website, and schools during the End-Term report period. Copies of the brochures can be viewed at [www.beriverfriendly.net](http://www.beriverfriendly.net).

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**PO.3.3 Conduct a mixed media campaign (e.g., radio, print ads, television, signage, etc.)**

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PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 & 4, Att. J	↔	↔	↔

***Summary of Work Completed***

In January 2015, the Partnership launched a new mixed media IPM (Integrated Pest Management) campaign ("Some Jeepers are Keepers") that focused on informing the public about less toxic and natural ways of controlling pests around the home. The Partnership continued this successful outreach campaign through fiscal years 2019/2020 and 2020/2021 in both English and Spanish. Table PO-1 presents the total number of impressions.

During the End Term Report period, the IPM campaign included radio, digital online and bus advertising, and social media ads. Specifically, in fiscal year 2019/2020, the IPM campaign included website and social media outreach, as well as residual "bonus" radio, digital and bus ads and an educational infographic to show the common stormwater pollutants and actions for clean water. In fiscal year 2020/2021, the IPM campaign included website and social media outreach, and a social media BINGO game/contest.

In addition to the IPM campaign, the Partnership continued to promote the "Trash Your Trash" message to encourage the public to properly dispose of trash. This campaign was developed out of Caltrans "Protect Every Drop" program which the Partnership has supported since fiscal year 2016/2017. During fiscal year 2019/2020, the "Trash Your Trash" message involved developing and displaying 17 outdoor signs, 19 gas station pump toppers and 15 gas station window clings with the "Trash Your Trash" Clean Rivers Start with Clean Streets message, delivering a total of 8,781,111 impressions. In fiscal year 2020/2021, the "Trash Your Trash" message involved developing and displaying 13 outdoor signs, 19 gas station pump toppers, digital and mobile display ads and digital billboards, delivering a total of 5,777,753 impressions.

In fiscal year 2020/2021, the Partnership launched a community-based trash outreach campaign to better engage with Partnership-area residents and businesses and bring more awareness to the trash/litter issue. The campaign involved developing a community toolkit to guide and facilitate clean-ups, a business tip card, an



online reporting form and social media outreach, delivering a total of 912,668 impressions. See images below for examples of outreach campaigns used during the 2019/2020 and 2020/2021 fiscal years.

The Partnership also utilized social media platforms in fiscal years 2019/2020-2020/2021, such as Facebook to promote pollution prevention messages. The Be River Friendly Facebook page currently has 1,876 followers. Seasonal messages related to trash, pesticides, pet waste, household hazardous waste, used motor oil disposal and other topics were featured on a consistent basis to motivate the public to engage in everyday activities that protect and conserve waterways.

**Table PO-1 IPM and Trash Your Trash Campaign Summary, End-Term Report Period**

Campaigns	FY 19/20	FY 20/21
Integrated Pest Management (IPM) Campaign	19,515	100,000
Protect Every Drop/Trash Your Trash	8,781,111	5,777,753
Trash Your Trash (community-based)	N/A	912,668
<b>Total Impressions</b>	<b>8,800,626</b>	<b>6,790,421</b>



*"Trash Your Trash" Signs were placed in several locations to discourage illegal dumping.*

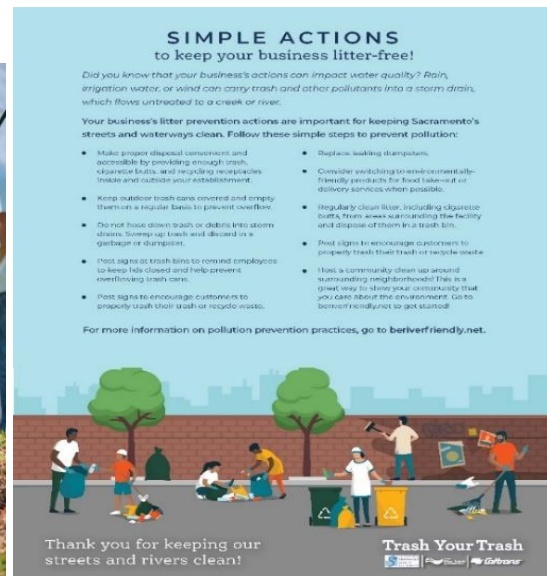


*"Trash Your Trash" gas toppers and window clings were placed in several locations to discourage littering.*

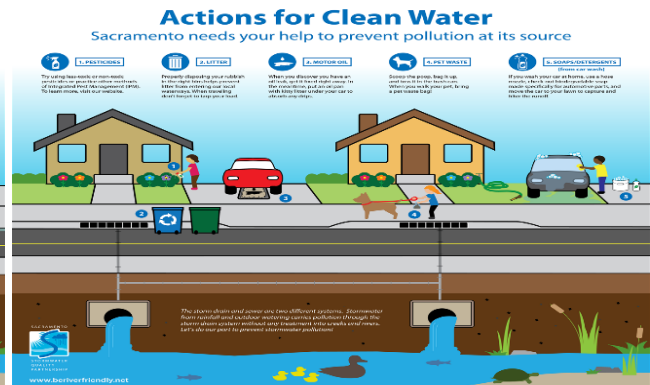
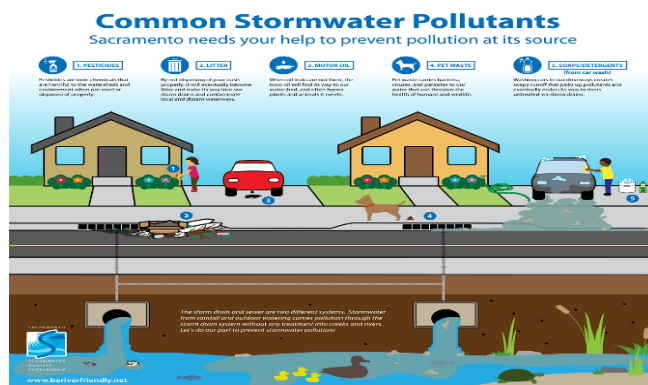




"Trash Your Trash" Community Toolkit



"Trash Your Trash" Business Tipcard



Infographics for Common Stormwater Pollutants and Actions for Clean Water



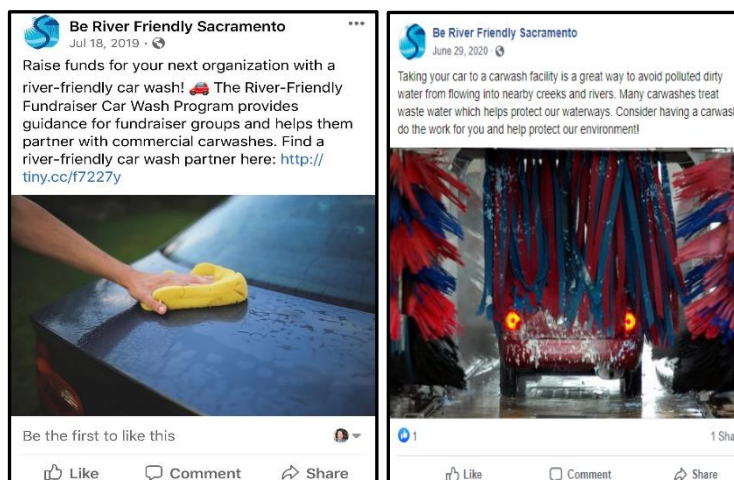
"Be River Friendly" social media interactive BINGO game/contest

**PO.3.4 Maintain a program that addresses fundraiser carwash discharges**

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 & 4, Att. J	↔	↔	↔

**Summary of Work Completed**

During the End-Term Report Period, the Partnership continued to conduct outreach to increase awareness on the impact of fundraiser carwash discharges in waterways by maintaining the River-Friendly Fundraiser Carwash Program website [www.riverfriendlycarwash.org](http://www.riverfriendlycarwash.org) and using social media as a platform to educate the public about the harmful consequences of carwash discharges and promote the benefits of using car wash facilities.

**PO.3.5 Maintain home and garden care programs, including the distribution of educational materials (e.g., Our Water Our World, Waterwise, and River-Friendly Landscaping)**

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 & 4, Att. J	↔	↔	↔

**Summary of Work Completed**

The Partnership participated in several home and garden care programs to promote less toxic methods for controlling pests:

**Our Water Our World**

The Partnership supported the Our Water Our World (OWOW) IPM outreach program in the Partnership-area. The Partnership partnered with retail stores to make less toxic products more available to consumers such as Home Depot, Emigh Ace Hardware and Green Acres nursery.

A total of 16 stores participated in the OWOW program during 2019/2020 fiscal year. Over 5,000 less toxic informational materials (including translated materials) were distributed via the store displays. In addition, participating stores placed small labels in front of products to help consumers identify products that were non-toxic or less toxic than their conventional counterparts. In addition, OWOW fact sheets were distributed at landscape/garden related events and several other outreach events.

On behalf of the Partnership, OWOW participated in events at store locations and helped encourage customers to select less-toxic pesticide options. According to the 16 participating locations, there was an average increase of up to 25% in sales of less-toxic pesticides (varied by location). In most cases, the stores feel that the less toxic products continued to grow in demand.

In 2020/2021 fiscal year, a total of 17 stores participated in the OWOW program. Approximately 14,600 less toxic informational materials (including translated materials) were distributed via the store displays. The

program also offered 15 educational events (12 virtual webinars and 3 in-person) to the public that focused on integrated pest management (IPM).



*OWOW staff table at Emigh Hardware in Sacramento.*



*OWOW shelf labels promoting less toxic products at Home Depot in Sacramento.*

### ***River-Friendly Landscaping***

The Partnership joined efforts with Rescape California to provide training and outreach to the public and landscape professionals on sustainable landscaping, which included topics such as integrated pest management and water wise irrigation (see Appendix PO-3). A total of 82 professionals attended trainings and 2,400 people attended community outreach and education events, including virtual events. See table PO-2 to view the event attendees for the End-Term report period. Trainings and community workshops were promoted through online newsletters and landscaping tips and resources were promoted on the Be River Friendly Sacramento's Facebook page. For more information about the trainings, see PO.5.3.

**Table PO- 2 Participants in Rescape CA's Community Outreach and Education Events**

Fiscal Year	Number of Participants
2019/2020	140
2020/2021	2,260
<b>TOTALS</b>	<b>2,400</b>

### **PO.3.6 Continue to promote proper disposal of pet waste through the multicultural, mixed media outreach campaign**

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 & 4, Att. J	↔	↔	↔




### ***Summary of Work Completed***

The Partnership continued to spread messages about the importance of picking up pet waste through social media (e.g., Facebook) and through a partnership with a local animal shelter. See PO 1.2 and PO.3.3 for more information.

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**PO.3.7 Continue partnerships with other governmental agencies or special districts and private businesses**


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PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 & 4, Att. J			

***Summary of Work Completed***

To ensure effective stormwater outreach activities and promote coordination and consistent messages, the Partnership continued to cultivate and maintain relationships with other government agencies, special districts, local businesses, trade and professional associations, schools, environmental groups, involved individuals, and the media. The following are a few ways the Partnership coordinated with other groups during the fiscal year to promote pollution prevent practices that protect local waterways.

***Sacramento Area Creeks Council***

The Partnership has coordinated with the Sacramento Area Creeks Council for many years to support trash clean-up efforts such as Creek Week. During the 2019/2020 and 2020/2021 fiscal year, traditional Creek Week events were cancelled due to the pandemic. However, the public was encouraged to continue clean ups around their homes and team up with local groups to pick up trash. For more information, see PO.1.1.

***ReScape California (formerly EcoLandscape California)***

Rescape California is actively involved in the River-Friendly Landscape outreach effort which includes promoting landscaping practices that reduce stormwater runoff and the application of pesticides. The Partnership works with the organization to promote and expand the use of the River-Friendly Landscaping practices in the Sacramento region through training/workshops and outreach events. See PO.3.5 for additional information.

***Regional San— Our Water Our World Program***

Regional San partnered with the Partnership on the Our Water Our World program (see PO.3.5) and IPM campaign (see PO 3.3), which educates the public on pesticide issues and promotes less toxic alternative methods for controlling specific pests.

***Business Environmental Resource Center (BERC)***

BERC continued to conduct outreach to businesses on pollution prevention practices. In addition, the Partnership coordinates with BERC to promote the Sacramento Area Sustainable Business Program (SASB) to the pressure washer industry (see PO.5.1).

***Regional Water Authority***

The Partnership continues to support Regional Water Authority's efforts in reducing water use which is a significant component of River Friendly Landscaping practices. The Partnership continues to look for opportunities to integrate water conservation messages in outreach campaigns and activities.


***Capital Public Radio***

The Partnership continued to display interpretive signage (see below) at Capitol Public Radio's community demonstration garden that provides education on IPM methods to the general public. The garden is a gathering space for community members, policy makers, educators and students. More information about the garden can be found at <https://www.capradio.org/garden/>.



## Demonstration Garden Signs at Capital Public Radio

**COMBATING GARDEN PESTS WITHOUT PESTICIDES, ATTRACTING GOOD BUGS**



**BENEFICIAL BUGS:**

- LADYBUGS
- HONEY BEES
- LACEWINGS
- DAMSEL BUGS
- SOLDIER BEETLES
- DRAGONFLIES
- GROUND BEETLES
- PRAYING MANTS
- PARASITIC WASPS
- HOVERFLIES
- PRATE BUGS
- SPIDERS

# INTEGRATED PEST MANAGEMENT (IPM)

Natural pest control that is healthier for people and the environment

**IPM** aims to remove unwanted insects from your garden while attracting helpful ones, using a mix of environmentally friendly methods:

- 1 NATURE** • Garden-damaging bugs have natural enemies like ladybugs and wasps. Certain plants such as yarrow and marigolds attract these beneficial insects, reducing the need for pesticides.
- 2 DIY** • Mulches keep invasive weeds at bay. Copper barriers on raised garden beds reduce damage by slugs and snails. Screens keep out birds and insects.
- 3 NONTOXIC** • Pesticide-free gardening practices that help keep pests in check include correct irrigation, crop rotation and growing plants resistant to pests, disease and drought (typically native species).





**GOOD BUGS**  
MANY TYPES OF WASPS INFECT THEIR EGGS INTO CATERPILLARS AND THE HATCHING LARVAE EAT THE PLANT-DAMAGING PEST.

**MONITORING**  
KEEP AN EYE ON THE BALANCE OF BUGS WITHIN YOUR YARD'S ECOSYSTEM. CATCHING A PROBLEM EARLIER MAKES IT EASIER TO CORRECT.

**4 DAYS TO HATCH**  
ONCE HATCHED, THE LARVAE OF GREEN LACEWINGS FEAST ON DESTRUCTIVE APHIDS.

**5,000 APHIDS**  
A LADYBUG CAN EAT THIS MANY OF THEM IN ITS LIFETIME.

**30,000 LENSES IN EACH EYE**  
THE BENEFICIAL DRAGONFLY HAS SUPERIOR VISION, GIVING IT AN INCREDIBLE HUNTING ADVANTAGE.







CapRadio GARDEN  
AT SACRAMENTO STATE

SOURCES: U.S. EPA, University of California, The California Department of Pesticide Regulation, National Resources Defense Council, Department of Agriculture

DESIGNED BY  
SACRAMENTO  
STORMWATER  
QUALITY  
PARTNERSHIP

**A GREEN ALTERNATIVE TO STORM DRAINS, WHICH FLUSH POLLUTED RUNOFF INTO STREAMS, LAKES AND OCEANS**



**BIOSWALES:**

- PROTECT WATER QUALITY
- REDUCE SEWER OVERFLOWS
- INCREASE WELL WATER SUPPLIES
- ATTRACT BIRDS AND BUTTERFLIES
- LOOK NICER THAN CONCRETE STORMWATER CHANNELS

# BIOSWALES AND WATER QUALITY

Capture, absorb and filter polluted stormwater runoff on site

**BIOSWALES** These shallow, vegetated ditches let nature do the work of cleansing polluted rainwater and snowmelt that run off streets and parking lots. The methods are low-tech:

- 1 DETENTION** • Vegetation slows the runoff, allowing silt, toxic metals and other pollutants to settle out.
- 2 FILTRATION** • Grasses and shrubs filter runoff as it passes through them.
- 3 INFILTRATION** • Pollutants are captured in porous soils as the runoff seeps underground.

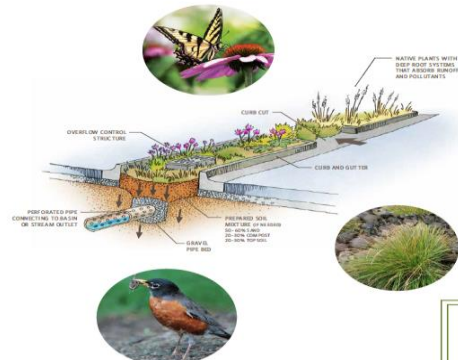
**124 BODIES OF WATER**  
IN CALIFORNIA ARE TOO POLLUTED FOR SWIMMING AND FISHING, LONG.

**CLEANSING RUNOFF AT HOME**  
HOMEOWNERS CAN BUILD A "RAIN GARDEN" — A SUNSHIN VEGETATED AREA THAT CAPTURES RUNOFF FROM THE ROOF AND DRIVEWAY AND ALLOWING WATER TO SEEP UNDERGROUND.

**49% OF POLLUTANTS IN RUNOFF**  
CAN BE REMOVED BY A WELL-DESIGNED BIOSWALE DURING A MODERATE STORM (2016)

**99% OF STORM DRAIN SYSTEMS**  
IN CALIFORNIA EMPTY THE RUNOFF DIRECTLY INTO A WATER BODY WITHOUT BEING CLEANSED AT A WATER TREATMENT PLANT (2016)

**RUNOFF POLLUTANTS**  
INCLUDE MOTOR OIL, GASOLINE, PESTICIDES, FERTILIZERS, PET WASTES, SEDIMENT AND TOXIC METALS LIKE MERCURY, COPPER, ZINC AND LEAD.



CapRadio GARDEN  
AT SACRAMENTO STATE

SOURCES: U.S. EPA, University of California, The California Department of Pesticide Regulation, National Resources Defense Council, Department of Agriculture

DESIGNED BY  
SACRAMENTO  
STORMWATER  
QUALITY  
PARTNERSHIP

**PO.3.8 Support community outreach events**

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 & 4, Att. J	↔	↔	↔

**Summary of Work Completed**

The Partnership participated in nine (9) community outreach events during the 2019/2020 fiscal year to reach as many Partnership-area residents as possible and promoted community outreach events to the public. The Partnership provided a stormwater booth at most events and distributed educational and promotional materials. Due to the COVID-19 pandemic, several outreach events that were planned for the 2019/2020 and 2020/2021 fiscal year were cancelled. Table PO-3 lists the regional events that were attended prior to the pandemic. In addition, the County and cities conduct municipality-specific events in their jurisdictions which may be included in the Permittee-specific Annual Reports.

**Table PO-3 Community Outreach Events, FY 19-20 and FY 20-21**

Date	Event Name	No. of Attendees	Target Audience
7/5/2019	First Friday at North Natomas Regional Park	1,000	General Public
8/3/2019	Harvest Day	1,000	Landscape/Garden Community
8/31/2019	Chalk-it-Up at Fremont Park	5,000	General Public
9/7/2019	Pops in the Park at South Natomas Community Park	2,000	General Public
9/18/2019	The Sacramento Sustainable Business Awards	200	General Public
9/19/2019	Keep Our Waters Clean Survey Day at West Marine	200	General Public
9/26/2019	State of CA Dept. of Technology Green Fair	200	State Employees
10/19/2019	Highwater Jamboree at Miller Park	2,000	General Public
10/26/2019	Water Discovery Day at the Sacramento Water Treatment Plant	500	General Public
	<b>Total Attendees</b>	<b>12,100</b>	

*2019 Dept. of Technology Green Fair Event**2019 Harvest Day Event*

**PO. 3.9 Conduct Public Opinion Surveys to identify changes in awareness and behavior**

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 & 4, Att. J	↔		↔

**Summary of Work Completed**

A Public Opinion Survey was scheduled for the 2020/2021 fiscal year. Refer to section PO. 3.1 to view the key findings of the public opinion survey. For a copy of the full report, please see Appendix PO-2.

**PO.4 Public School Education****PO.4.1 Conduct classroom presentations**

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 & 4, Att. J	↔	↔	↔

**Summary of Work Completed**

In the 2019/2020 fiscal year, the Partnership provided the “Splash in the Class” program to students throughout the Partnership area. “Splash in the Class” is a 70-minute, highly interactive presentation covering stormwater pollution found around the home and neighborhood, pollution prevention, the aquatic food chain, and the hydrological cycle- linking all three aspects together. Due to Covid-19 and the resulting school closures, the Splash in the Class efforts had to be suspended in mid-March; and therefore, 59 of the proposed 90 classroom presentations were delivered. A total of 1,593 students in grades 3-6 received the presentation.

During the 2020/2021 fiscal year, Splash in the Class was able to better plan and adapt to the virtual classroom environment that many Sacramento area schools had transitioned to. A total of 181 virtual classroom presentations were delivered to schools throughout Sacramento County. A total of 6,360 students in grades 3-6 received the presentation.

**PO.5 Business Outreach****PO.5.1 Evaluate strategies to partner with sustainable business programs to encourage stormwater pollution prevention in businesses, targeting mobile businesses**

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 & 4, Att. J			

**Summary of Work Completed**

Although there were no specific activities scheduled for the 2019/2020 and 2020/2021 fiscal year, the Partnership worked with BERC to encourage pollution prevention practices to businesses, including mobile businesses. In the 2019/2020 fiscal year, BERC engaged with 2,065 businesses through various outreach activities. In addition, BERC provided business consultations and welcome packets to 11 new pressure washing businesses explaining the benefits of the Sustainable Business Program which promotes and recognizes businesses that take voluntary actions to prevent pollution and conserve resources, including mobile businesses.

During the 2020/2021 fiscal year, BERC worked with 6 pressure washers to ensure proper BMPs and to assist them with correct environmental regulation. In addition, 59 informational packets were mailed to pressure washers. BERC provides a Sustainable Business checklist developed specifically for pressure washers which can be found at <http://www.sacberc.org/sasb/Pages/Checklist-and-Publications.aspx>

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**PO.5.2 Continue to provide educational materials to businesses including languages other than English**

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PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 & 4, Att. J	↔	↔	↔

***Summary of Work Completed***

Several stormwater brochures in other languages, such as in Spanish and Russian, were made available to the public at outreach events, workshops, and the Partnership's website during the 2019/2020 and 2020/2021 fiscal year. Copies of the brochures can be viewed at [www.beriverfriendly.net](http://www.beriverfriendly.net).

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**PO.5.3 Work with landscape professionals to encourage the use of River-Friendly Landscaping guidelines**

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PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 & 4, Att. J	↔	↔	↔

***Summary of Work Completed***

The Partnership collaborated with Rescape California to provide training on River-Friendly Landscaping (RFL) principles to 82 professionals during the 2019/2020 and 2020/2021 fiscal year. The trainings included topics on integrated pest management and runoff reduction. These trainings were converted to a virtual platform to allow the continuation of educational opportunities. Events and details about the training program are available on Rescape CA's website <https://www.rescapeca.org/>

**Table PO-4 Participants in Rescape CA's Professional Landscape Trainings**

Fiscal Year	Number of Participants
FY 19/20	43
FY 20/21	39
<b>TOTALS</b>	<b>82</b>



**PO.5.4 Maintain partner participation of nurseries and retail outlets and training of their staff to promote pesticide reduction programs (e.g., OWOW)**

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 & 4, Att. J	↔	↔	↔

***Summary of Work Completed***

A total of 16 stores are participated in the Our Water Our World (OWOW) program in the 2019/2020 fiscal year and 17 stores participated in 2020/2021 fiscal year. Additional information is also discussed in PO.3.5. Due to Covid-19, OWOW had to suspend its in-person staff training efforts in March 2020; however, these trainings resumed in the Spring of 2021. For the seventh and eighth years in a row, the Partnership conducted surveys of store staff to gauge the effectiveness of the trainings that took place in stores between January and February. Similar to past results, the 2019/2020 and 2020/2021 fiscal year results demonstrate improvement in the store staff's post-training awareness of stormwater issues and ability to accurately assist customers to find products that would address their needs while being less toxic to the environment.



*Green Acres staff participated in the OWOW training in Sacramento.*



*Home Depot staff participated in the OWOW training in Sacramento.*

**Element Effectiveness Assessment**

On October 1, 2016, the Regional Water Board's General Permit for Discharges from Municipal Separate Storm Sewer Systems (MS4 General Permit) became effective. The MS4 General Permit requires the compilation of a Priority Water Quality Constituent (PWQC) list, a Reasonable Assurance Analysis (RAA); and after approval of the list and RAA, a revision to the SQIP (and work plans) to address the PWQCs. A revised SQIP was not yet required during the End-Term Report period. Therefore the Partnership continues to implement the 2009 SQIP and its associated work plans. For the tasks being performed, the overall effectiveness of the SQIP and the individual Elements in reducing stormwater pollution to the maximum extent practicable, achieving compliance with water quality standards in receiving waters, and meeting performance standards was provided in the Long Term Effectiveness Assessment (LTEA) submitted to the Regional Water Board on March 15, 2013.

## **Assessment Summary and Proposed Element Changes**

### **Work Plan Tasks Completion Summary**

All tasks were completed per the 2-Year Work Plan.

### **Revisions and changes to the work plan and/or SQIP**

The SQIP will be updated in accordance with the MS4 General Permit and the associated schedule of deliverables. A 5-Year Work Plan will be submitted with the updated SQIP. There are no changes recommended during the interim. The Partnership's 2021/2022 and 2022/2023 Regional Work Plans are included in Appendix Intro-1.

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## **Regional Commercial/Industrial**

### **Introduction**

The primary goal of the Regional Commercial/Industrial Program is to reduce the discharge of stormwater pollutants to the maximum extent practicable (MEP) and effectively eliminate illegal non-stormwater discharges from Permittee-identified priority commercial and industrial facilities and businesses within the Jurisdictional Runoff Areas of the Sacramento Stormwater Quality Partnership. As required by the MS4 General Permit, the Regional Commercial/Industrial Program works to address these conditions by conducting regular compliance inspections and associated enforcement at priority commercial and industrial facilities, as well as through outreach targeted at business operators and their employees.

Through Memoranda of Understanding (MOU) executed with each of the Permittees, the Sacramento County Environmental Management Department (EMD) is authorized to implement the Commercial and Industrial Stormwater Compliance Program (CISCP) in which triennial stormwater compliance inspections and associated enforcement are conducted at identified priority commercial and industrial facilities on behalf of all the Permittees. Implementation of the CISCP makes efficient use of Permittee resources, provides regional consistency, and minimizes impacts to businesses through consolidation of inspections with other EMD inspection programs. The categories of priority commercial and industrial facilities that are included in the CISCP are as follows:

- Facilities with coverage under the Industrial General Permit
- Auto body shops
- Auto repair shops
- Auto dealers
- Equipment rental facilities
- Kennels
- Nurseries
- Retail gasoline outlets (i.e., gas stations)
- Restaurants

The Regional Commercial/Industrial Program is implemented in addition to Permittee-specific Commercial/Industrial Element activities described in agency-specific mid-term and end-term reports submitted separately by each Permittee.

For background information and additional details about any of the activities/tasks referenced above or listed in this report, see the 2009 SQIP or the 2-year Work Plan (2019-2021) submitted with the 2019 Mid-Term Report in November 2019.

### **Activities**

All activities required by the MS4 General Permit, 2009 SQIP and the 2-Year Work Plans (2019-2021) were completed. The section numbers reflect the chapters outlined in the 2009 SQIP and the task numbers are from the 2-Year Work Plan (2019-2021).

#### **CI.1 Legal Authority**

No tasks scheduled for the End-Term Report period.

#### **CI.2 Priority Industry and Industrial Pollutant Identification**

No tasks scheduled for the End-Term Report period.

### CI.3 Commercial and Industrial Stormwater Compliance Program (CISCP) - EMD

#### CI.3.1 Maintain fee ordinance

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 &4, Att. J	↔	↔	↔

##### **Summary of Work Completed**

There were no changes to the fee ordinance during the End-Term Report period.

#### CI.3.2 Maintain enforcement policy

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 &4, Att. J	↔	↔	↔

##### **Summary of Work Completed**

There were no changes made to the enforcement policy during the End-Term Report period.

EMD continued to implement its Progressive Approach Enforcement Policy by conducting “Monitoring Status” re-inspections with associated fees at facilities with repeat violations to ensure continued compliance.

See tasks CI.3.4 and CI.3.7 of this chapter for a summary of enforcement actions conducted during the End-Term Report period.

#### CI.3.3 Inspect priority industries once every 3 years

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 &4, Att. J	↔	↔	↔

##### **Summary of Work Completed**

EMD continued to conduct triennial inspections of priority industry inspections during the End-Term Report period. Refer to Appendix CI-1 for a list of businesses included in the CISCP inventory, organized by jurisdiction.

Table CI-1 shows inspection-related data for the End-Term Report period, which includes the total number of facilities included in the inspection inventory at the start and end of the fiscal year, the number of routine inspections that were conducted, the number of inspections that were conducted in response to complaints received, and the number of re-inspections (i.e., follow up inspections) that were conducted, by industry type. Re-inspections were conducted when the violation(s) noted during a previous inspection were serious, or when suitable return to compliance documentation was not submitted to EMD following issuance of an enforcement action.

**Table CI-1 EMD Inspection Data**

<b>Fiscal Year 2019/2020</b>					
<b>Category</b>	<b>No. facilities as of 7/1/19</b>	<b>No. facilities as of 6/30/20</b>	<b>No. inspections conducted</b>	<b>No. Complaint Response conducted</b>	<b>No. re-inspections conducted</b>
Auto body shops	198	210	92	1	0
Auto dealers	167	161	60	0	1
Auto repair shops	658	673	299	4	2
Equipment rental companies	32	31	12	0	0
Nurseries	9	9	0	0	0
Kennels	36	34	14	1	0
Restaurants <sup>1, 2</sup>	3,441 <sup>1,2</sup>	3,487 <sup>1,2</sup>	1,399	91	15
Retail Gasoline Outlets <sup>2</sup>	328	328	115	1	0
Industrial General Permitted Industries	267	255	44	7	2
<b>Total</b>	<b>5,136</b>	<b>5,188</b>	<b>2,035</b>	<b>105</b>	<b>20</b>
<b>Fiscal Year 2020/2021</b>					
<b>Category</b>	<b>No. facilities as of 7/1/20</b>	<b>No. facilities as of 6/30/21</b>	<b>No. inspections conducted</b>	<b>No. Complaint Response conducted</b>	<b>No. re-inspections conducted</b>
Auto body shops	210	212	31	3	1
Auto dealers	161	158	26	1	0
Auto repair shops	673	665	110	1	0
Equipment rental companies	31	31	8	2	0
Nurseries	9	9	6	0	0
Kennels	34	34	7	0	0
Restaurants <sup>1, 2</sup>	3,487 <sup>1,2</sup>	3,437 <sup>1,2</sup>	1,075	74	25
Retail Gasoline Outlets <sup>2</sup>	328	332	103	0	0
Industrial General Permitted Industries	255	265	128	6	1
<b>Total</b>	<b>5,188</b>	<b>5,143</b>	<b>1,494</b>	<b>87</b>	<b>27</b>
<b>Combined Two-Year Totals</b>			<b>3,529</b>	<b>192</b>	<b>47</b>

<sup>1</sup> Also includes Licensed Health Care Facilities

<sup>2</sup> RGO/mini-mart facilities are two separate businesses with one joint inspection completed to consolidate inspection time. However, they are tracked as separate businesses and each one location is counted as two facilities/inspections. Currently, there are 124 facilities in this RGO/mini-mart category. This number is manually added to both the restaurant total and the RGO total. Therefore, the totals in these columns will not be consistent with the totals in Appendix CI-1.

### CI.3.4 Track violations during 3 year cycle

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 &4, Att. J	↔	↔	↔

#### Summary of Work Completed

As shown in Table CI-2, a total of 2,087 violations were noted by EMD staff for the End-Term Report period. Violations may be noted during routine inspections, complaint responses or during re-inspections. Multiple violations observed at a facility may be addressed with a single enforcement action. See task CI.3.7 for a summary of enforcement actions that were issued in response to these recorded violations.

**Table CI-2 Observed Violations by EMD**

Fiscal Year	Violations Observed				Total Number Violations
	Non-Filer	NSD*	Poor House Keeping**	Illicit Connections	
2019/2020	N/A	58	1059	1	1,118
2020/2021	N/A	58	906	5	969
Totals:		116	1,965	6	2,087

\* NSD: Non-stormwater discharge to storm drain system.

\*\* Poor housekeeping includes waste management problems.

### CI.3.5 Track follow-up inspections during 3 year cycle

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 &4, Att. J	↔	↔	↔

#### Summary of Work Completed

As shown in Table CI-1, forty-seven (47) re-inspections (also called follow-up inspections) were conducted by EMD staff during the End-Term Report period.

### CI.3.6 De-list facilities with no exposure of pollutants to stormwater

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 &4, Att. J	↔	↔	↔

#### Summary of Work Completed

Appendix C1-2 lists the facilities that were determined by EMD to have no exposure to stormwater during the End-Term Report period and were de-listed from the inspection program. All facilities de-listed from the EMD program sign an agreement with EMD stating that conditions (all activities and storage are conducted indoors) at the facility will not change and that the facility will be brought back into the stormwater inspection program if the facility is found to be in violation of said agreement.

### CI.3.7 Conduct enforcement (incl. warnings, NOVs, Cease and Desist Orders, ACPs, and Cost Recoveries)

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 &4, Att. J	↔	↔	↔

#### Summary of Work Completed

As shown in Table CI-3, a total of 2,139 enforcement actions were conducted by EMD during the End-Term Report period. Multiple violations may be addressed with a single enforcement action. Additionally, a single violation can result in multiple enforcement actions. See CI.3.4 for information related to the Stormwater Ordinance violations observed that resulted in these enforcement actions.

Monitoring status inspections are an enforcement tool that is implemented in lieu of issuing an Administrative Enforcement Order to a facility found to be in violation of the Stormwater Ordinance after

follow-up inspections. Monitoring status inspections are used as an enforcement tool as well as a means of “monitoring” a facility to ensure it does not relapse into non-compliance. The inspections consist of one to three unannounced re-inspections (the number of inspections conducted is based upon the type and number of violations that are present, and are billed for at EMD’s current hourly rate).

**Table CI-3 Enforcement Actions by EMD**

Fiscal Year	Notice of Violation	Cease and Desist Order	Admin. Enforcement Order	Fine	Monitoring Status Inspections	Re-inspection Fee Assessed for failure to Comply	Non-filer referrals to the Regional Water Board	Other	Total # of Enforcement Actions*
2019/2020	1,118	0	1	0	4	11	1	0	1,135
2020/2021	969	0	0	0	3	27	5	0	1,004
<b>Totals</b>	<b>2,087</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>7</b>	<b>38</b>	<b>6</b>	<b>0</b>	<b>2,139</b>

\* Enforcement Actions = Notice of Violations + Admin. Enforcement Order + Monitoring Status Inspections

### CI.3.8 Conduct workshops, upon request and as needs are identified, for the regulated community

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 &4, Att. J	↔	↔	↔

#### Summary of Work Completed

Workshops are conducted when requested by the regulated community, or when a high number of facilities are found to have similar or reoccurring violations. No workshops were requested during the End-Term Report period.

### CI.3.9 Provide annual training to CISCIP inspectors

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 &4, Att. J	↔	↔	↔

#### Summary of Work Completed

EMD employees were provided annual training by Stormwater Staff in each year of the End-Term Report period. Refer to appendix CI-3 to view EMD training documentation.

### CI.3.10 CISCIP database - track facility inventory, inspections, enforcement and outreach materials distributed (facilities included to be based on list of priority industries)




PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 &4, Att. J	↔	↔	↔

#### Summary of Work Completed

The CISCIP database is updated daily to document additions and deletions of facilities from the inventory, as well as to document inspections and enforcement conducted over the course of the End-Term Report period.



**CI.3.11 Refer significant violations to the Regional Water Board**




PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 &4, Att. J			

**Summary of Work Completed**

A report of violations issued during inspections is emailed on a monthly basis by EMD to the Regional Water Board. No significant violations were encountered during the End-Term Report period.

Refer to Appendix CI-4 for an example of the monthly reports of violations submitted by EMD to the Regional Water Board.




**CI.3.12 Refer potential Industrial General Permit non-filers to the Regional Water Board**

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 &4, Att. J			

**Summary of Work Completed**

A total of 6 potential Industrial General Permit non-filers were referred to the Regional Water Board during the End-Term Report period.

**CI.3.13 Track NOIs filed for potential non-filers referred to the Regional Water Board**

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 &4, Att. J			




**Summary of Work Completed**

Table CI-4 shows the number of potential General Permit non-filers that were referred to the Regional Water Board, as well as the number that filed a Notice of Intent (NOI) following referral.

**Table CI-4 Industrial General Permit Non-File Referrals and NOIs Submitted**

Fiscal Year	Number Referred to Regional Water Board	Number of facilities that submitted NOI to Regional Water Board	Percentage of Referrals that submitted NOIs
2019/2020	1	1	100%
2020/2021	5	2	40%

**CI.3.14 Investigate Regional Water Board referrals within 3 working days of receipt of referral**

PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 &4, Att. J			

**Summary of Work Completed**

No Regional Water Board referrals were given to EMD for investigation during the End-Term Report period.

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**CI.3.15 Provide enforcement support to Regional Water Board related to facilities in the CISCIP inventory, including providing facility and historical information, and staff for joint inspections when available**


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PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 &4, Att. J	↔	↔	↔

**Summary of Work Completed**

No requests for enforcement support were made by the Regional Water Board to EMD during the End-Term Report period.

**CI.4 Permittee Evaluations**

No tasks were scheduled for Permittee evaluations during the End-Term Report period.

**CI.5 Outreach**


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**CI.5.1 Distribute industry and pollutant-specific educational materials**


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PERMIT REFERENCE	SCHEDULED FY18/19	SCHEDULED FY19/20	SCHEDULED FY20/21
Attachment V.E.3 &4, Att. J	↔	↔	↔

**Summary of Work Completed**

Educational materials are available via EMDs website

(<http://www.emd.sacounty.net/Pages/ComplianceAssistanceBulletins.aspx#Stormwater>) and were made available to businesses during each of the routine inspections conducted by the EMD.

**Element Effectiveness Assessment**

On October 1, 2016, the Regional Water Board's General Permit for Discharges from Municipal Separate Storm Sewer Systems (MS4 General Permit) became effective. The MS4 General Permit requires the compilation of a Priority Water Quality Constituent (PWQC) list, a Reasonable Assurance Analysis (RAA); and after approval of the list and RAA, a revision to the SQIP (and work plans) to address the PWQCs. A revised SQIP was not yet required during the End-Term Report period. Therefore the Partnership continues to implement the 2009 SQIP and its associated work plans. For the tasks being performed, the overall effectiveness of the SQIP and the individual Elements in reducing stormwater pollution to the maximum extent practicable, achieving compliance with water quality standards in receiving waters, and meeting performance standards was provided in the Long Term Effectiveness Assessment (LTEA) submitted to the Regional Water Board on March 15, 2013.

## **Assessment Summary and Proposed Element Changes**

### **Work Plan Tasks Completion Summary**

All tasks were completed per the 2-Year Work Plan.

### **Revisions and changes to the work plan and/or SQIP**

The SQIP will be updated in accordance with the MS4 General Permit and the associated schedule of deliverables. A 5-Year Work Plan will be submitted with the updated SQIP. There are no changes recommended during the interim. The Partnership's 2021/2022 and 2022/2023 Regional Work Plans are included in Appendix Intro-1.

**This report was provided electronically.**

**Appendices not attached due to file size.**

**The Sacramento Stormwater Quality Partnership Regional End-Term Report appendices was provided on November 30, 2021 to the Central Valley Regional Water Quality Control Board on USB drive.**