



## CITY OF STOCKTON

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October 1, 2020

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

**CITY OF STOCKTON AND COUNTY OF SAN JOAQUIN STORM WATER MANAGEMENT PROGRAMS 2019-2020 ANNUAL REPORT (ORDER NO. R5-2016-0040, NPDES PERMIT NO. CAS0085324)**

Dear Ms. Lee:

For your review and consideration, the City of Stockton (City) and County of San Joaquin (County) are jointly submitting this 2019-2020 Annual Report, in accordance with the National Pollutant Discharge Elimination System Permit (NPDES) and Waste Discharge Requirements (WDR) General Permit for Discharges from Municipal Separate Storm Sewer Systems (MS4) (General Permit), Part V.F.4. The report reflects all storm water activities conducted during Fiscal Year 2019-2020.

A copy has been submitted to [centralvalleysacramento@waterboards.ca.gov](mailto:centralvalleysacramento@waterboards.ca.gov).

If you have any questions, please contact Jason Farnsworth of City of Stockton at (209) 937-8155 or [Jason.Farnsworth@stocktonca.gov](mailto:Jason.Farnsworth@stocktonca.gov) or Jessica Jones of San Joaquin County at (209) 663-2403 or [jessicajones@sjgov.org](mailto:jessicajones@sjgov.org).

Sincerely,

CITY OF STOCKTON  
JOHN ABREW  
DIRECTOR OF MUNICIPAL UTILITIES

COUNTY OF SAN JOAQUIN  
MATTHEW ZIDAR  
WATER RESOURCES MANAGER

Attachment: 2019-2020 Annual Report

Cc: Karen Ashby, Larry Walker Associates  
Rachel Warren, Larry Walker Associates

OCTOBER 2020

CITY OF STOCKTON & COUNTY OF SAN JOAQUIN

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# National Pollutant Discharge Elimination System (Order Nos. R5-2016-0040-002 and R5-2016-0040-003) Municipal Stormwater Program 2019-2020 Annual Report

*Prepared by*

LARRY WALKER ASSOCIATES, INC.




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## CERTIFICATION

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. [40 CFR 122.22(d)]

Executed on the 30<sup>th</sup> day of September 2020, at the City of Stockton.



John Abrew  
City of Stockton  
Director of Municipal Utilities



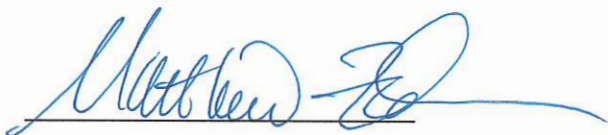
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Executed on the 29th day of September 2020, at the County of San Joaquin.



Matthew Zidar  
County of San Joaquin  
Water Resources Manager

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# 1 Introduction

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The most recent National Pollutant Discharge Elimination System (NPDES) and Waste Discharge Requirements (WDR) General Permit for Discharges from Municipal Separate Storm Sewer Systems (MS4) (Region-wide Permit) was adopted June 23, 2016.<sup>1</sup> The City of Stockton (City) and County of San Joaquin (County) submitted a Notice of Intent (NOI) application package in accordance with Part V.B.1 of the Region-wide Permit on November 1, 2016 and received the Notice of Applicability (NOA) from the Central Valley Regional Water Quality Control Board (Regional Water Board) on November 30, 2016.<sup>2</sup> The NOI package included the applicable forms, a preliminary prioritization approach, and a Work Plan outlining how the current Stormwater Management Plan (SWMP) and any modifications will be implemented until a revised SWMP is submitted to and approved by the Regional Water Board (anticipated in 2020-2021).

A SWMP is being implemented within the jurisdictional limits of the City and the urbanized areas of the County<sup>3</sup> regulated under the Region-wide Permit.<sup>4</sup> The SWMP represents the strategy for controlling the discharge of pollutants from the MS4 to the Maximum Extent Practicable (MEP) and includes a wide range of Best Management Practices (BMPs). This Annual Report focuses on the control measures and BMPs included in the currently approved SWMP.

On May 30, 2017, the City and County submitted their *Assessment and Prioritization of Water Quality Constituents in the Stockton Urbanized Area* (Assessment and Prioritization). This document identified the priority water quality constituents (PWQCs)—indicator bacteria, methylmercury, dissolved oxygen, and trash—that will be the focus of the program and the revised SWMP. The City and County met with Regional Water Board staff in June 2017 and received written comments on July 2, 2018. A revised Assessment and Prioritization was submitted on October 2, 2018.

On July 1, 2019, the City and County submitted a *Reasonable Assurance Analysis* (RAA), which built upon the Assessment and Prioritization and was developed to satisfy the requirements described in Region-wide Permit Parts V.E.3.a (*Identify Milestones, Strategies, and Activities for Storm Water Management Program*) and V.E.3.b (*Reasonable Assurance Analysis*). The revised SWMP will be structured to address the identified PWQCs and include milestones, strategies, and activities that will, over time (as identified through the RAA), ensure that the City's and the County's discharges will not cause or contribute to exceedances of applicable water quality objectives (WQOs) within the relevant receiving waters. The RAA results will assist in guiding

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<sup>1</sup> [https://www.waterboards.ca.gov/centralvalley/board\\_decisions/adopted\\_orders/general\\_orders/r5-2016-0040\\_ms4.pdf](https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0040_ms4.pdf)

<sup>2</sup> City of Stockton under Order No. R5-2016-0040-002; County of San Joaquin under Order No. R5-2016-0040-003.

<sup>3</sup> This jurisdictional area is also referred to as the Stockton Urbanized Area.

<sup>4</sup> The SWMP was approved by the Central Valley Regional Water Quality Control Board on October 9, 2009 (Resolution R5-2009-0105).

the revision of the SWMP and identifying prioritized program elements, strategies, and activities that can be implemented based on available capital and operations and maintenance resources.

The Region-wide 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) are conducted as part of the Mid-Term and End-Term Reports. 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 Oct 1)	Status
Year 1 (2016-2017)	Annual Report (2016-2017)	<i>Complete</i>
Year 2 (2017-2018)	Annual Report (2017-2018)	<i>Complete</i>
Year 3 (2018-2019)	Mid-Term Report (2016-2019)	<i>Complete</i>
<b>Year 4 (2019-2020)<sup>[a]</sup></b>	<b>Annual Report (2019-2020)</b>	
Year 5 (2020-2021)	End-Term Report (2016-2021)	

[a] Blue text indicates the current report type.

This 2019-2020 Annual Report is being submitted in accordance with Region-wide Permit Provisions V.F.4 and includes the items listed in **Table 2**.

**Table 2. Annual Report Requirements**

Report Requirement	Location
(a.i) A statement certifying that the Storm Water Management Plan and Work Plan were implemented as approved.	Section 2
(a.ii) A summary of activities and tasks scheduled to be implemented in the upcoming year. If the Work Plan is still being implemented as described from the previous year, the Permittee may refer to the Work Plan.	Section 2
(a.iii) Any proposed minor modifications to the Storm Water Management Program; or any proposed Work Plan Modification.	Section 6
(a.iv) A completed certification statement, in accordance with the signatory requirements in Attachment H (Standard Permit Provisions and General Provisions).	Certification Statements
(c) Provision of water quality data collected.	Appendix C
(d) Additional requirements described in 40 CFR §122.42(c) (Attachment H, Standard Permit Provisions and General Provisions).	Certification Statements Section 3 Section 4 & Appendix B, D Section 5

## 2 Implementation Statement

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The City and County have developed a comprehensive approach for implementing the stormwater program within the Stockton Urbanized Area (SUA) consistent with the intent of the 2009 SWMP and modifications thereto, and as described by the Work Plan submitted to, and as approved by, the Regional Water Board as a part of the NOI application package (NOI Work Plan).

During 2019-2020, the City and County implemented the stormwater program within the SUA consistent with the intent of the SWMP and as outlined by the NOI Work Plan submitted with the NOI package in November 2016 (**Appendix A**). During 2020-2021, until a revised SWMP and Work Plan are approved, the City and County will continue to implement the stormwater program within the SUA as outlined by the NOI Work Plan.

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### 3 Annual Expenditures and Projected Budget

The City and County calculated the current NPDES expenditures, as well as the projected expenditures for the next fiscal year. The City's fiscal analysis is provided in **Table 3**, and the County's fiscal analysis is provided in **Table 4**.

**Table 3. 2019-2020 Fiscal Analysis, City of Stockton**

Program Element	Expenditures During Fiscal Year 2019-2020	Estimated Budget for Fiscal Year 2020-2021 <sup>[a]</sup>
<b>Program Management:</b> Staff salaries, utility billing, phone charges, computer software/rentals, memberships, permit fees, indirect cost allocations, training, consultant contracts	\$1,689,694	\$1,932,566
<b>Public Outreach:</b> Staff salaries, industrial, commercial, and residential programs, including media and community events	\$2,231	\$9,000
<b>Municipal Operations:</b> Staff salaries, Capital Improvement Projects (CIPs), and Storm Drain System Cleaning and Maintenance (includes Illicit Discharges, illegal connections mitigation, and clean-up) <sup>[b]</sup>	\$3,726,539 <sup>[c]</sup>	\$3,142,734
<b>Industrial and Commercial:</b> Staff salaries, inspections, and follow-up inspections <sup>[d]</sup>	\$43,211	\$36,911
<b>Construction:</b> Staff salaries, outreach	\$6,300	\$0 <sup>[e]</sup>
<b>Planning and Land Development:</b> Staff salaries	\$43,142	\$0 <sup>[e]</sup>
<b>Water Quality Monitoring Programs:</b> Includes Baseline Monitoring Program, Bioassessment Analysis, Smith Canal Bathymetry Study, Detention Basin Monitoring, BMP Effectiveness Study, Sediment Toxicity, Smith Canal/Mosher Slough Low DO13267 Letter Monitoring	\$397,123	\$510,038
<b>Water Quality Based Programs:</b> Includes Pesticide, Pathogen, Mercury, and DO Work Plans and Implementation	\$100,510	\$133,051
<b>TOTAL</b>	<b>\$ 6,008,750</b>	<b>\$ 5,764,290</b>

[a] Annually, the City compartmentalizes the overall budget into individual Program Element expenditures. The City has developed and is implementing a consistent methodology for tracking stormwater program expenditures.

[b] Facility Pollution Prevention Plans (FPPPs) are paid for out of Public Works budget and are not a Stormwater Expense.

[c] As the City enhanced the consistency of its operations, CIP costs were incorporated into the Municipal Operations budget.

[d] The Industrial and Commercial Inspection Program is conducted in-house by Stormwater and Environmental Control Staff.

[e] The costs for the Construction and Planning and Land Development Programs are accounted for under Program Management.

The City's stormwater program is funded primarily by a storm drain maintenance or user fee. The fee/equivalent residential unit is \$2.10/month per Equivalent Residential Unit.

**Table 4. 2019-2020 Fiscal Analysis, County of San Joaquin**

Program Element	Expenditures During Fiscal Year 2019-2020 <sup>[a]</sup>	Estimated Budget for Fiscal Year 2020-2021
Program Management, including Program Implementation, Assessment, and Reporting	\$ 641,748	\$ 850,125
Illicit Discharges	\$ 2,362	\$ 30,000
Public Outreach	\$ 33,866	\$ 80,000
Municipal Operations	\$ 3,000	\$ 50,000
Industrial and Commercial	\$ 2,427	\$ 40,000
Construction <sup>[b]</sup>	\$ 25,468	\$ 40,000
Planning and Land Development	\$ 9,100	\$ 40,000
Water Quality Monitoring Program and Water Quality Based Programs	\$ 150,000	\$ 225,000
<b>TOTAL</b>	<b>\$ 867,969</b>	<b>\$ 1,355,125<sup>[c]</sup></b>

[a] Actual expenditures for fiscal year 2019-2020 do not reflect the County's 2019-2020 shared costs of co-permittee expenditures with the City of Stockton; however, the expenditures do include back billings from the County's shared costs of co-permittee expenditures with the City of Stockton for 2016-2017 and 2017-2018.

[b] Responsibility for reviewing and implementing Stormwater Pollution Prevention Plan (SWPPP) Inspections for the San Joaquin County Road Projects were transferred to the Field Engineering division, which is responsible for construction activities for the department. Expenditures for reviewing and implementing SWPPPs were absorbed by the Field Engineering Division budget and were not available to report along with Stormwater expenses.

[c] The increase in the estimated budget for fiscal year 2020-2021 is due to an anticipated, increased reliance on outside services.

The County's funding sources are summarized in **Table 5**. The County's stormwater program is funded primarily by an assessed fee of \$35/year per Equivalent Residential Unit.

**Table 5. 2019-2020 Funding Sources, County of San Joaquin**

Source	Funding for Fiscal Year 2019-2020, by Percentage	Estimated Funding for Fiscal Year 2020-2021, by Percentage
Assessment Fee/Special District Fund (Fee \$35/parcel)	82%	82%
Inspection/plan check fees	12%	12%
Miscellaneous Revenue – Interest Income	6%	6%

## 4 Stormwater Quality Monitoring Program and Analysis of Monitoring Results

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Provision V.E of the Region-wide Permit requires monitoring of urban runoff and receiving waters. In accordance with the previous permit, the City and County received approval from the Regional Water Board in 2015 for conducting an Alternative Monitoring Program (AMP).<sup>5</sup> The AMP is consistent with the proposed monitoring program from the Report of Waste Discharge (June 2012 ROWD),<sup>6</sup> meets the objectives of the Region-wide Permit, directs resources to the most critical water quality issues, and collects data to support management decisions to address those critical issues.

The primary objective of the AMP is to focus on Pollutants of Concern (POCs) as identified within the June 2012 ROWD and implement an intensive monitoring approach to determine the source(s) of pollutants in urban discharges. In addition to the AMP, the City and County were approved to participate in the Delta Regional Monitoring Program (Delta RMP) in lieu of conducting some of the local water quality monitoring.<sup>7</sup>

As a result, the revised monitoring program was initiated during the 2015-2016 reporting period and has been implemented since that time. The AMP will form the basis of the monitoring program that will be submitted as a part of the revised SWMP and will shift the monitoring program focus from the POCs to the PWQCs identified in the Assessment and Prioritization.

The monitoring program is a focused effort conducted within six (6) key water bodies on a rotating basis. The schedule for the staggered waterbody monitoring is shown in **Table 6**.

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<sup>5</sup> City of Stockton and County of San Joaquin. Submittal of Alternative Stormwater Monitoring Program (Order No. R5-2015-0024). June 10, 2015; Central Valley Regional Water Quality Control Board. Approval of City of Stockton and County of San Joaquin's 27 October Alternative Monitoring Program. 4 November 2015.

<sup>6</sup> National Pollutant Discharge Elimination System Municipal Stormwater Program – *Report of Waste Discharge & Proposed Stormwater Management Plan*, June 2012 (Section 2.7; Tables 2-42, 2-43, 2-44, 2-45, 2-46, and 2-47).

<sup>7</sup> Central Valley Regional Water Quality Control Board. Approval to Allow the City of Stockton and County of San Joaquin to Reduce Local Water Quality Monitoring and Participate in the Delta Regional Monitoring Program. 4 November 2015.



**Table 6. AMP Staggered Waterbody Monitoring Schedule**

Waterbody	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Mosher Slough <sup>[a]</sup>						
Calaveras River <sup>[a]</sup>						
Duck Creek <sup>[a]</sup>						
Smith Canal <sup>[a]</sup>						
<b>Mormon Slough<sup>[b]</sup></b>						
Five-Mile Slough						

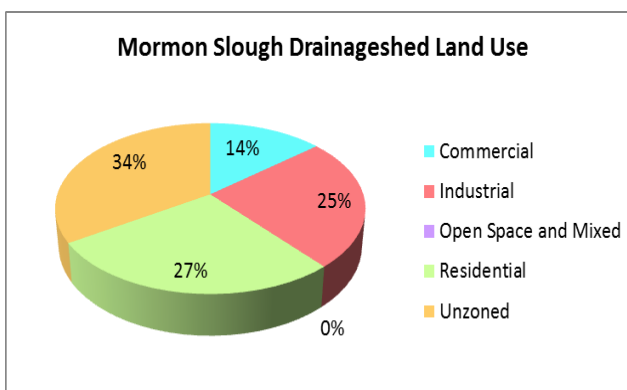
[a] Historical monitoring locations

[b] Blue text indicates most recent year's monitoring location

The monitoring conducted for 2019-2020 at Mormon Slough is summarized below.

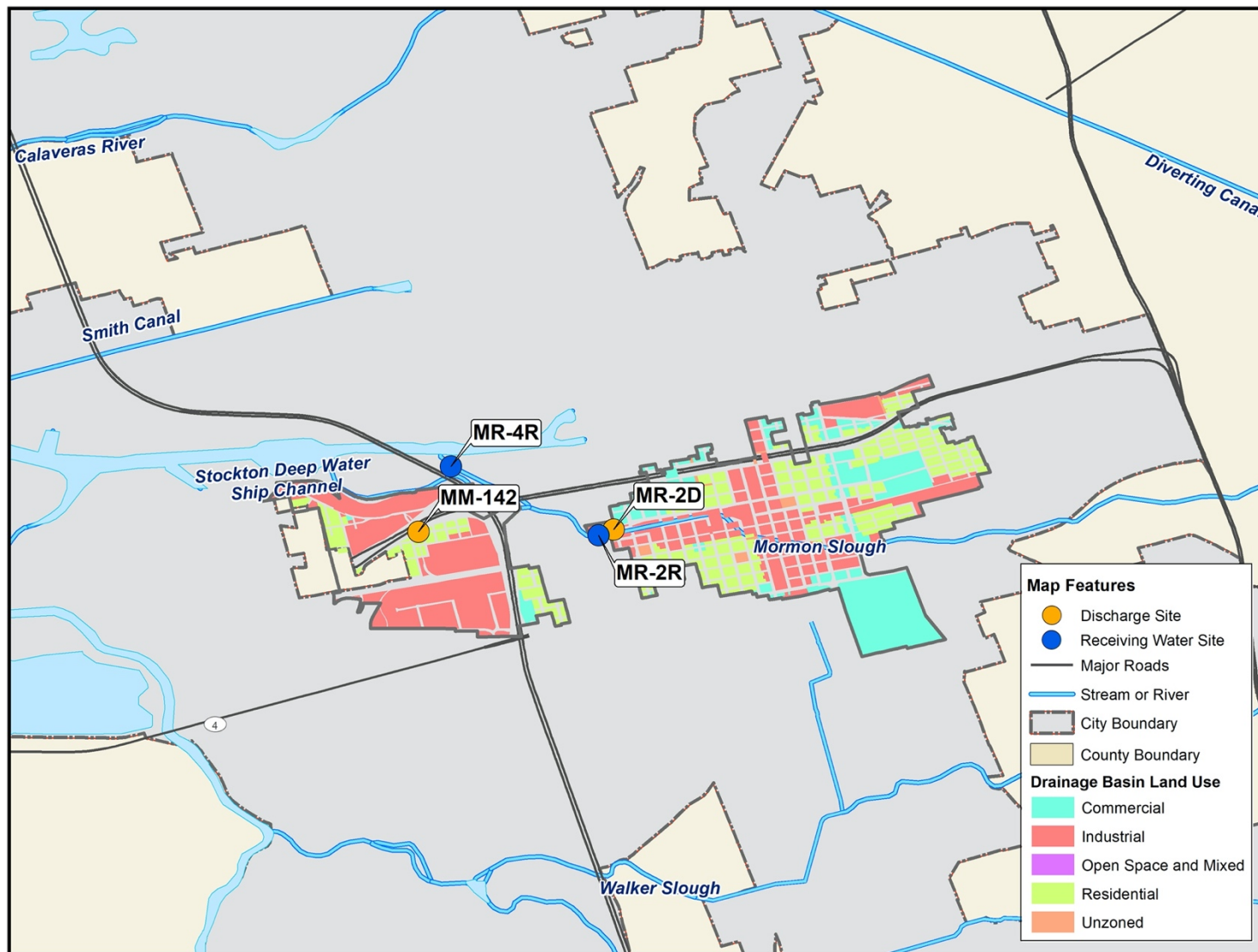
#### 4.1 WATERBODY AND DRAINAGESHED MONITORING

Mormon Slough has a mixed-use watershed with residential, commercial, and industrial land uses. Mormon Slough receives inputs from groundwater, tidal exchange, and urban runoff. Mormon Slough originally extended from its confluence with the Stockton Deep Water Ship Channel to the Calaveras River at the Bellota Weir. The Stockton Diversion Canal was built in 1910 to carry flows from Mormon Slough around the east side of the City and back to the Calaveras River. In 1969, the United States Army Corps of Engineers modified Mormon Slough from its confluence with the Stockton Diversion upstream to the Bellota Weir to convey additional flood flows. Flow is not released downstream of the Bellota Weir except when flood releases are made from Hogan Dam or when stormwater flows into the river and channels. Consequently, stretches of Mormon Slough remain dry for days to months at a time during the winter and early spring. Overall, the slough is very shallow. Sites monitored at Mormon Slough are shown in **Figure 1** and listed in **Table 7**.



Monitoring at Mormon Slough focused on the POCs within the drainageshed, which include:

- Indicator bacteria (*E. coli* and fecal coliform); and
- Dissolved oxygen (DO).



**Figure 1. Mormon Slough Monitoring Sites and Drainagesheds**

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**Table 7. Mormon Slough Monitoring Sites and Constituents Monitored**

Constituents Monitored	Monitoring Type	Sites Monitored			
		MR-2D	MR-2R	MM-142 <sup>[b]</sup>	MR-4R
Field parameters	Water quality	G	G	G	G
Dissolved oxygen	Water quality	G	G	G	G
Indicator bacteria ( <i>E. coli</i> & fecal coliform)	Water quality	G	G	G	G

G = Grab

[a] This site replaced the discharge site “Orange Sonora” after the first monitoring event (which was re-sampled at site MM-142).

Monitoring activities completed during 2019-2020 are summarized in **Table 8**. Monitoring efforts and results for these POCs are presented in the following sections.

**Table 8. 2019-2020 Monitoring Program Activities**

Monitoring Program Activity	Status
Outfall and Receiving Water Monitoring (Section 4.1.2)	<ul style="list-style-type: none"> <li>3 wet weather events monitored at 2 urban discharge and 2 receiving water sites</li> <li>4 dry weather events monitored at 2 urban discharge and 2 receiving water sites<sup>[a]</sup></li> </ul>
Rainwater/Atmospheric Deposition Monitoring (Section 4.1.3)	<ul style="list-style-type: none"> <li>Rainwater monitored at 3 locations during 3 wet weather events</li> </ul>

[a] One set of urban discharge and receiving water sites were monitored during event DW39 (sampled on 9/27/2019), while the other urban discharge and receiving water sites were monitored during event DW40 (sampled on 11/26/2019). Combined, these represent one dry weather event.

#### 4.1.1 Storm Tracking and Selection

Monitoring of stormwater runoff is a key component of the monitoring program<sup>8</sup> and requires a high level of coordination of equipment and field crews. Incoming storms are tracked and assessed against storm selection criteria (e.g., amount of precipitation, days since last rain event, duration of event) and the forecasted reliability that the storm will occur in the SUA. Wet weather monitoring is particularly challenging in the SUA, as rainfall forecasts are often unreliable due to the convective nature of incoming storms. In addition, because storms normally intersect Stockton traveling from the west to the east, it is not unusual for northern Stockton to receive substantial rainfall, while southern Stockton remains dry, or vice versa.

Wet weather events are timed to attempt to capture urban runoff impacts with the highest possible representation of the targeted storm event (i.e., high percent capture) using flow-based composite samplers at urban discharge stations when possible. Grab sampling techniques, when feasible, are conducted near the peak of storm event hydrographs, and are used at all receiving

<sup>8</sup> The Regional Permit defines the “monitoring year” as October 1 through September 30. Monitoring events are reported for the fiscal year, due to the time needed for data reporting and processing.

water stations. Due to standard method requirements, grab sampling is used for the following constituents, when monitored at the applicable waterbody:

- Oil and grease,
- Indicator bacteria,
- Mercury/methylmercury, and
- Pesticides.

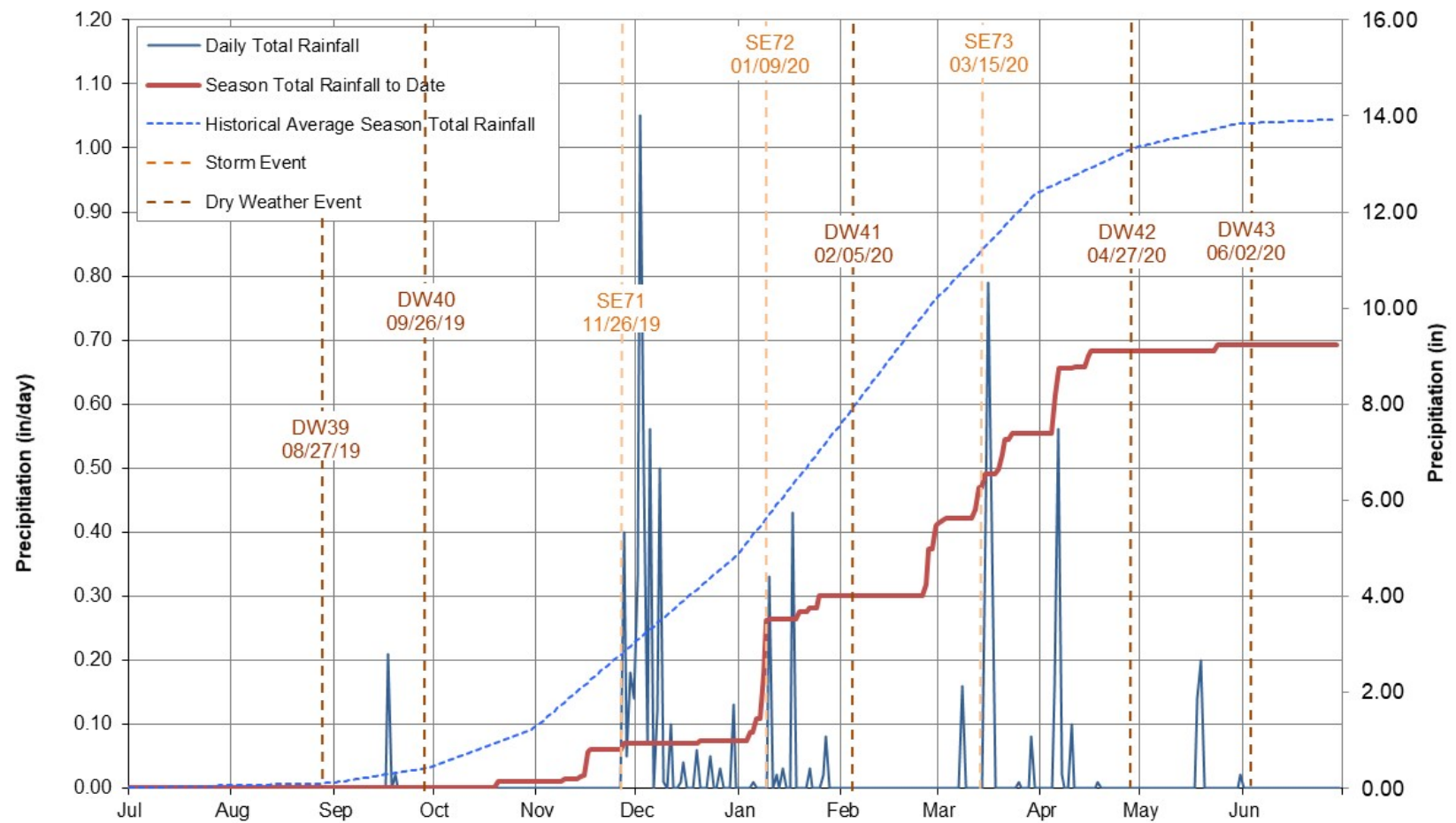
The daily total rainfall at the Stockton Metropolitan Airport<sup>9</sup> during the 2019-2020 monitoring year is shown in **Figure 2**. The total cumulative total seasonal rainfall (relative to the historical average<sup>10</sup>) and monitoring event timing are also shown. Historical average annual rainfall at the Stockton Metropolitan Airport is 14 inches. The 2019-2020 monitoring year had below-average precipitation with 8.58 inches of rain, which is 61.6% of historical annual rainfall. Although the 2019-2020 wet season was drier than average, the California Department of Water Resources classified the 2019 water year (ending September 30, 2019) as “wet” for the San Joaquin Valley.<sup>11</sup> The 2020 water year classification is not expected to be determined until May 2021.

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<sup>9</sup> [https://cdec.water.ca.gov/cgi-progs/queryCSV?station\\_id=SOC&sensor\\_num=45&dur\\_code=D&start\\_date=7%2F1%2F2016&end\\_date=6%2F30%2F2017&data\\_wish=View+CSV+Data](https://cdec.water.ca.gov/cgi-progs/queryCSV?station_id=SOC&sensor_num=45&dur_code=D&start_date=7%2F1%2F2016&end_date=6%2F30%2F2017&data_wish=View+CSV+Data)

<sup>10</sup> Based on 1981-2010 data. <http://www.cnrfc.noaa.gov/awipsProducts/RNOWRKCLI.php>

<sup>11</sup> <http://cdec.water.ca.gov/cgi-progs/iodir/WSIHIST>



**Figure 2. 2019-2020 Precipitation at Stockton Metropolitan Airport and Captured Monitoring Events**

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#### 4.1.1.1 Details of 2019-2020 Wet Weather Monitoring Events

Each monitoring event is unique in terms of the antecedent weather conditions, flow in the receiving waterbody, field conditions, etc. Runoff quality is particularly influenced by the amount and intensity of rainfall and time of sampling with respect to the rainfall hydrograph. The conditions for wet weather events conducted during 2019-2020 are summarized in **Table 9**.

**Table 9. Details of 2019-2020 Wet Weather Monitoring Events**

Storm Events <sup>[a, b]</sup>	SE71 11/26/2019	SE72 1/9/2020	SE73 3/15/2020
Time of first rain	11/26/2019 17:35	01/09/2020 07:15	03/14/2020 18:25
Time of last rain	11/29/2019 11:15	01/09/2020 18:50	03/15/2020 08:40
Total rain (in)	0.45	0.33	0.43
<b>Antecedent Conditions</b>			
Date of last precipitation	09/17/2019	01/05/2020	03/08/2020
Date of last storm > 0.1	09/17/2019	12/30/2019	03/08/2020
Days since last storm	70 Day	10 Days	7 Days
Date of last storm > 0.25	03/23/2019	12/08/2020	01/17/2020
Days since last storm	248 Days	32 Days	58 Days
Cumulative rainfall to date (in)	0.23	4.56	5.66

[a] Precipitation data are collected at the Stockton Metropolitan Airport, available at: [http://mesowest.utah.edu/cgi-bin/droman/download\\_ndb.cgi?stn=KSCK&year1=2014&day1=19&month1=6&hour1=&timetype=LOCAL&unit=0](http://mesowest.utah.edu/cgi-bin/droman/download_ndb.cgi?stn=KSCK&year1=2014&day1=19&month1=6&hour1=&timetype=LOCAL&unit=0)

[b] Per the AMP approved by the Regional Water Board, rainfall events of 0.15" - 0.25" are targeted for the monitoring program.

#### 4.1.2 Outfall and Receiving Water Monitoring

The monitoring program includes urban discharge outfall and receiving water monitoring. Urban discharge outfall monitoring characterizes the quality of urban runoff discharged from two storm drain outfalls along Mormon Slough. In addition, receiving water monitoring characterizes the quality of the receiving waters within the SUA. Two receiving water sites were sampled downstream of the urban discharge sites. The co-located sites are used to help determine if the urban discharge is potentially causing or contributing to contemporaneous in-stream exceedances of applicable water quality objectives.

Monitoring sites sampled in 2019-2020 are shown in **Table 7**.

- Urban discharge sites are labeled with a station and number code (e.g., MR-2D).
- Receiving water sites are labeled with an "R" for receiving water (e.g., MR-2R).

The outfall and receiving water monitoring sites and predominant land uses are summarized in **Table 10**.

**Table 10. 2019-2020 Outfall and Receiving Water Monitoring Sites on Mormon Slough**

Site Type	Station ID	Monitoring Site Description	Predominant Land Use	Drainage Area (acres)
Urban Outfall	MR-2D	Hazelton Lift Station, located at Hazelton Ave. and Commerce St.	Industrial	483
	MM-142	Fresno Ave. Pump Station, located at Fresno Ave. and Scotts St.	Commercial, Industrial, Residential	955
Receiving Water	MR-2R	Mormon Slough receiving water at Hazelton Lift Station	Industrial	NA
	MR-4R	Mormon Slough at Weber St. Bridge, located on the north side of Weber St. Bridge	Commercial, Industrial, Residential	NA

NA = not applicable

Monitoring is generally conducted during three wet weather events and four dry weather events each year. During 2019-2020, monitoring was completed at each urban discharge and receiving water site three (3) times during the wet season and four (4) times during the dry season. The timeline of the events is shown in **Figure 2** (above). The sites sampled during each event are listed in **Table 11**. Wet weather events (labeled “SE” for storm event) and dry weather events (labeled “DW” for dry weather) are numbered sequentially from the time when wet weather and dry weather monitoring events were initiated (in 1992 and 2004, respectively). During 2019-2020, the furthest downstream discharge and associated receiving water sampling locations were re-located following the first dry weather event DW39 on 8/27/19. The original site discharge selected (the Orange Sonora Pump Station) was not representative of urban runoff, as the sampling point contained water from the channel. The site was re-located to MM-142 and resampled on 9/26/19. The resampling at those locations for the first dry weather event was numbered as DW40. As such, samples for both DW39 and DW40 represent the first dry weather event.

**Table 11. Sites Sampled and Type of Sample Collected in 2019-2020**

Site Type	Station ID	DW39/40 <sup>[a]</sup>	SE71	SE72	DW41	SE73	DW42	DW43
		08/27/19 09/26/19	11/26/19	01/09/20	02/05/20	03/15/20	04/27/20	06/02/20
Urban Discharge	MR-2D	G	G	G	G	G	G	G
	MM-142	G	G	G	G	G	G	G
Receiving Water	MR-2R	G	G	G	G	G	G	G
	MR-4R	G	G	G	G	G	G	G

G = Grab

[a] The discharge Orange Sonora was sampled during event DW39 but was not representative of urban discharge. It was by station MM-142, which was sampled during DW40. The events DW39 and DW40 are considered one dry weather event. The corresponding receiving water stations were sampled at the same time as the urban discharge stations.

#### 4.1.2.1 Monitored Constituents and Analytical Methods

The constituents and corresponding analytical methods for urban discharge and receiving water monitoring comply with the Method Detection Limits (MDLs) specified in the monitoring program. The MDLs for the constituents sampled during the 2019-2020 monitoring events (as based on POCs identified in the June 2012 ROWD and shown in **Table 7**) are shown in **Table 12**.

**Table 12. Constituent Analysis for Outfall and Receiving Water Monitoring**

Constituents	Method Detection Limits (MDLs)	WQO(s)	WQO Source
<b>Conventional Pollutants</b> mg/L			
pH	0-14	6.5-8.5	Basin Plan <sup>[a]</sup>
Dissolved Oxygen	Sensitivity to 5 mg/L	>5-6 <sup>[b]</sup>	Basin Plan
<b>Field Measurements</b>			
Date	mm/dd/yyyy	--	--
Sample Time	hr:min (regular time)	--	--
Weather	degrees F	--	--
Water Temperature	degrees C	--	--
<b>Bacteria</b> MPN/100 mL			
Fecal coliform	<20	400	Basin Plan
<i>E. coli</i>	<20	235 <sup>[c]</sup>	Stockton Urban Waterbodies Pathogen TMDL
<b>General</b> mg/L			
Biochemical Oxygen Demand	2	--	--

[a] Water Quality Control Plan for the Sacramento River and San Joaquin River Basins.

[b] The WQO is >6 mg/L September 1 – November 30.

[c] Not an objective, but the Stockton Urban Waterbodies Pathogen TMDL single sample maximum water quality target.

The Region-wide Permit requires the submittal of water quality monitoring data to the Regional Water Board. As such, all water quality monitoring data are submitted in **Appendix B**. The Region-wide Permit also requires that the water quality monitoring data be uploaded to the California Environmental Data Exchange Network (CEDEN) or the Storm Water Multi-Application Reporting and Tracking System (SMARTS) database, when available. Notably, SMARTS is not currently available to accept the formatted data. Thus, only the receiving water data from 2019-2020 has been uploaded to CEDEN.

The waterbody/drainageshed monitoring results include the following information:

- Sample location and Station type (urban discharge [UD] or receiving water [RW])
- Sampling method (composite or grab)
- Sample date and time
- Sample result
- MDLs and Reporting Limits (RLs)
- Data qualifiers
- Comparison to the lowest applicable water quality objective (WQO)
- Name of the analyzing laboratory

For analyses that were non-detect (ND), the value is reported as less than the MDL, where the MDL is provided by the lab; otherwise, the value is reported as less than the RL.

Monitoring results for the constituents identified as water quality POCs for Mormon Slough are presented graphically to provide an overview of the characterization of Mormon Slough:

- Dissolved oxygen (**Figure 3**); and
- *E. coli* and fecal coliform (**Figure 4**).

Data for the POCs are summarized in tables in **Appendix C**. A complete assessment of monitoring results from Mormon Slough within the context of all monitored waterbodies, including data from the historical monitoring locations and an assessment of trends, will be provided in the End-Term Report (for Fiscal Year 2020-2021). For the purposes of this report, general observations are provided below:

- Dissolved oxygen (DO):
  - With a one exception (MM-142 during DW30), the DO WQOs were met at the discharge location MM-142 and receiving water location MM-4R.
  - DO concentrations were below the minimum WQO during events DW29, SE72 and DW42 at location MR-2D, and below the minimum WQO during events DW29, SE72, SE73, DW42, and DW43 at receiving water location MR-2R.SC-55 and SC-56.
- *E. coli*:
  - Frequent *E. coli* exceedances occurred at discharge and receiving water sites, primarily during storm events.
  - As is typical, indicator bacteria concentrations were generally higher during storm events than during dry weather events.

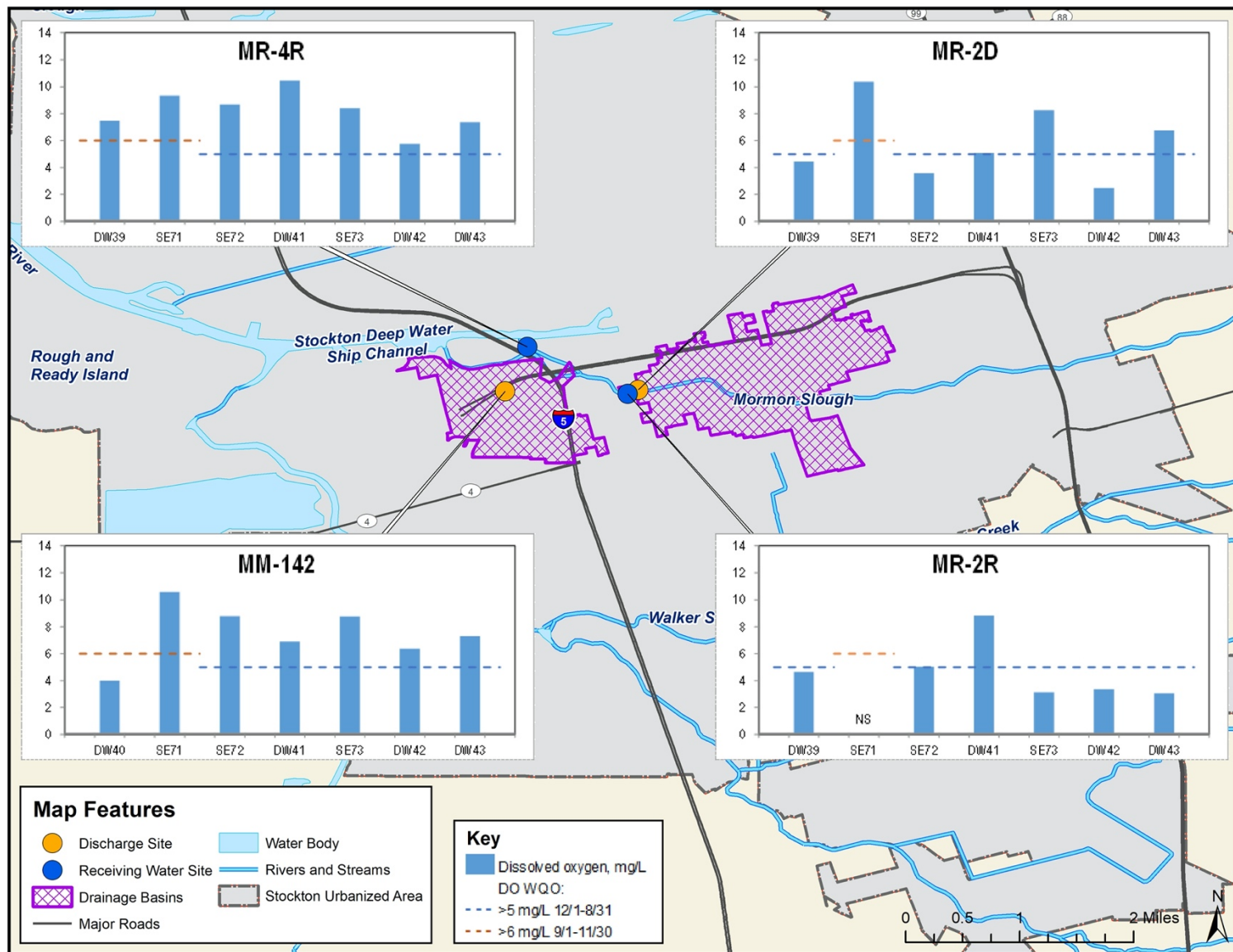
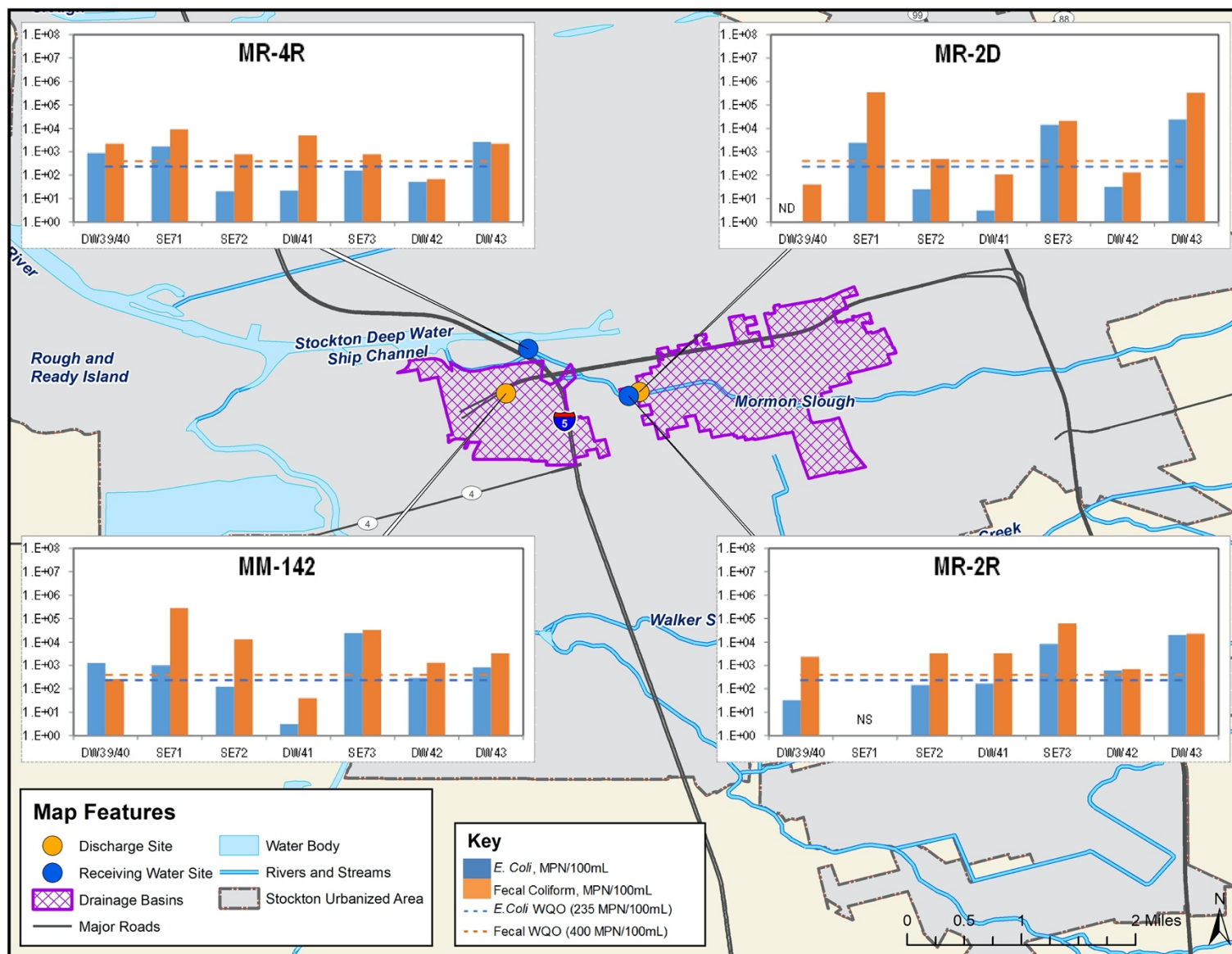


Figure 3. Mormon Slough 2019-2020 Dissolved Oxygen Concentrations (mg/L)

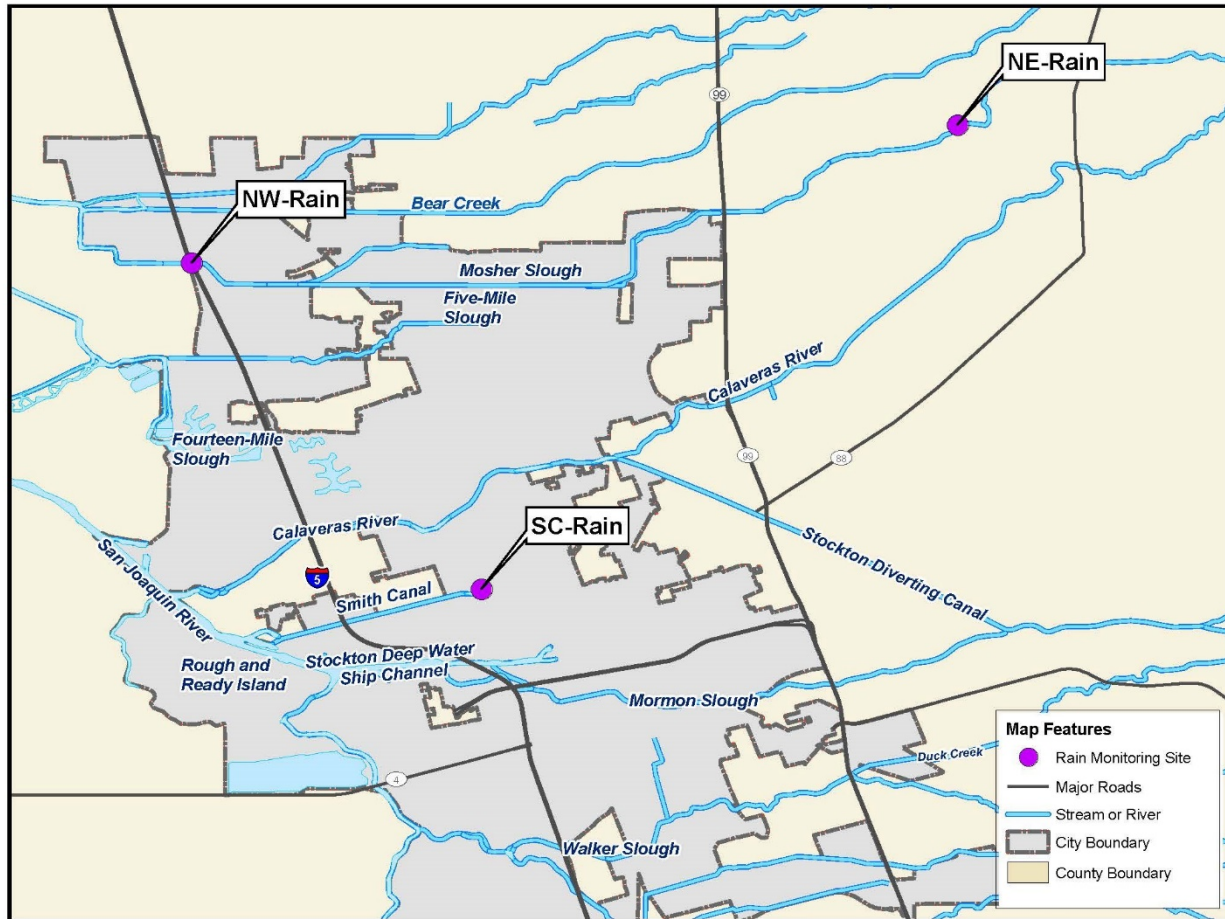


**Figure 4. Mormon Slough 2019-2020 *E. coli* and Fecal Coliform Concentrations (MPN/100 mL)**



### 4.1.3 Rainwater/Atmospheric Deposition Monitoring

During 2019-2020, rainwater/atmospheric deposition was monitored for methylmercury, total mercury, and pesticides (chlorpyrifos and pyrethroids) at three representative locations in the SUA. These three locations are shown in **Figure 5**.



**Figure 5. Rainwater/Atmospheric Deposition Monitoring Locations**

The monitoring sites include the following:

- NW-Rain – Located along Mosher Slough in the northwest corner of the SUA. This site has been historically monitored for the Pesticide Plan and is representative of atmospheric deposition generated within and outside of the SUA.
- NE-Rain – Located along Mosher Slough outside of the SUA, to the northeast. This site has been historically monitored for the Pesticide Plan and is representative of atmospheric deposition generated outside of the SUA.
- SC-Rain – Located at the Legion Park Pump Station, in the center of the SUA. This site is representative of atmospheric deposition generated within the SUA.



During 2019-2020, rainwater was monitored at all three sites during all three storm events sampled for outfall and receiving water monitoring. Rainwater monitoring results are shown in **Figure 6**. General observations are summarized below:

- Methylmercury and total mercury:
  - Methylmercury concentrations in rainwater were similar at all three locations.
  - Total mercury was detected in rainwater at concentrations below the WQO.
- Pesticides:
  - Chlorpyrifos was detected in rainwater in almost 50% of samples but was not detected in any samples during the first storm event (SE71), and was not detected above the WQO in any samples.
  - Pyrethroids were detected at the highest concentration and frequency at the northeast rain location (NE-Rain). Pyrethroid levels were highest at that location during the first storm event, SE71, but were similar at other locations across events.

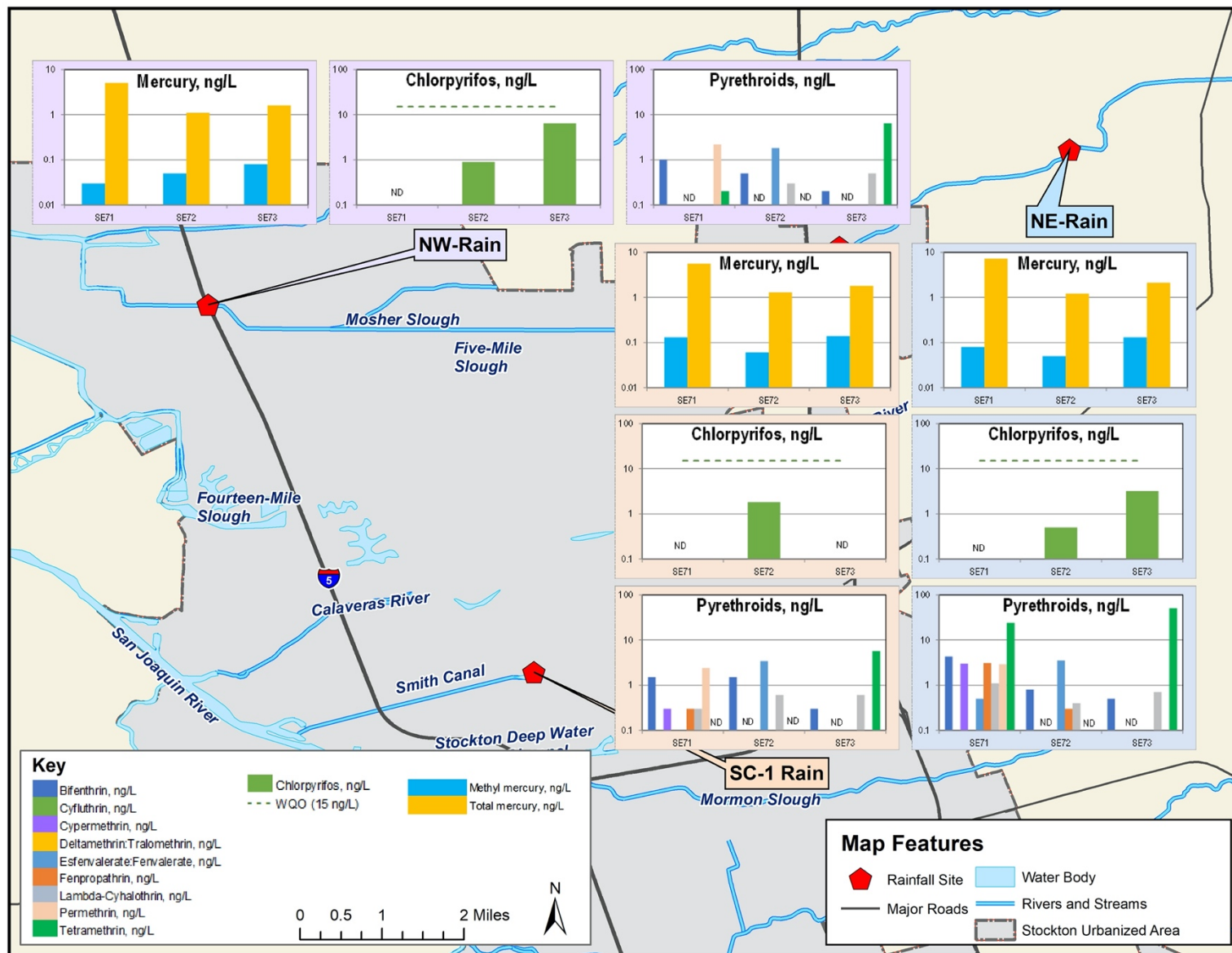


Figure 6. 2019-2020 Rainwater/Atmospheric Deposition Monitoring Results

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## 4.2 DATA QUALITY EVALUATION

Quality Assurance/Quality Control (QA/QC) refers to the process of reviewing lab and “field” initiated checks on the sampling and analytical process. These checks, which include field blanks, method blanks, field duplicates, lab duplicates, and matrix spike/matrix spike duplicates (MS/MSD), and data review are used to confirm that data are of high quality. Lab reports are initially screened by the field monitoring contractor for missing analytical data (both environmental and QA/QC), holding time exceedances, discrepancies in analytical methods or detection limits, and any apparent out-of-range environmental results. If the analytical work appears to be missing any requested analyses, the lab is asked to complete the missing analyses, if it is possible to do so within the specified holding time. Periodically, data analyses are requested even if samples exceed the specified hold time. Data qualifiers are appended to the environmental data points where appropriate by applying the data quality objectives provided by the laboratories. The QA/QC process allows for the identification of isolated incidents of out-of-range lab and sampling performance, but, more importantly, the process allows for the identification of potential long-term trends in lab and sampling performance. An important and ongoing component of the QA/QC program is to report and correct any identified problems.

Overall, no significant problems with data quality were identified during 2019-2020. Isolated instances of constituents detected in field blanks, field duplicates not meeting relative percent difference standards (RPD), and lab QA/QC issues occurred. However, when conducting such a large monitoring and reporting program, field, lab, and/or analytical issues occasionally arise. In general, the data collected and reported are considered high quality and suitable for data analysis with the qualifications noted in the **Appendix B** data report. The main qualifiers used are summarized in **Table 13**.

**Table 13. Definitions of Commonly Used QA/QC Qualifiers and Instances of Application**

Qualifier	Definition of Qualifier	Qualifier Description/Applicability 2019-2020
FB	The concentration of a given constituent was detected in the field blank. The associated environmental sample taken at the same site is considered an estimate.	<ul style="list-style-type: none"><li>A field blank was taken at one site for all constituents during each monitoring event. If no constituents were detected in field blank samples, the FB qualifier was not used.</li></ul>
FD	The Relative Percent Difference (RPD) between the concentrations of a given constituent in the field duplicate and the associated environmental sample was outside the acceptable limit. This indicates that the duplicability and precision of the results for this constituent may be low.	<ul style="list-style-type: none"><li>A field duplicate was taken at one site for all constituents during each monitoring event. All RPDs were within acceptable limits, so the FD qualifier was not used.</li></ul>
J	The concentration of a given constituents is between the MDL and the RL and is, therefore, an estimated value. The J qualifier does not indicate poor data quality because all the RLs used met permit requirements.	<ul style="list-style-type: none"><li>The J-flag qualifier is common in all data in the monitoring program and was frequently applied.</li></ul>
ND	A given constituent was not detected and is recorded as < MDL. The ND qualifier does not indicate poor data quality, but rather indicates that a constituent was simply not detected.	<ul style="list-style-type: none"><li>The ND qualifier is common in all data in the monitoring program and was frequently applied.</li></ul>

### 4.3 DELTA REGIONAL MONITORING PROGRAM

The Delta RMP is a stakeholder-directed project formed to develop a regional water quality monitoring program designed to improve understanding of water quality issues in the Sacramento-San Joaquin Delta. The goal of the Delta RMP is to better coordinate and design current and future monitoring activities in and around the Delta to create a cost effective approach for providing critically needed water quality information to better inform policy and regulatory decisions of the Regional Water Board and other federal, state and local agencies and organizations.<sup>12</sup> The Delta RMP focused the initial monitoring efforts on mercury, pesticides, nutrients, and pathogens. The City and County are contributing members of the Delta RMP, which commenced monitoring in 2015. The participation letter submitted to the Regional Water Board to describe the individual monitoring approach with Delta RMP participation is included in **Appendix D**. Delta RMP monitoring and data evaluation efforts during 2019-2020 continued to focus on mercury, pesticides, and nutrients. As the data are collected and results reported, the City and County will reference this data within the annual reports and Mid-Term and End-Term Reports, as needed.

### 4.4 TOTAL MAXIMUM DAILY LOADS AND WATER QUALITY CONTROL PROGRAMS

The Region-wide Permit requires the City and County to continue implementation of the stormwater monitoring program, which includes implementation actions and assessments related to applicable TMDLs. Efforts to fulfill TMDL monitoring requirements (included in Attachment G of the Region-wide Permit) are summarized in the following sections, along with other relevant water quality control programs.

#### 4.4.1 Sacramento-San Joaquin Delta Diazinon and Chlorpyrifos TMDL (Resolution R5-2006-0061)

The Sacramento San Joaquin Delta Diazinon and Chlorpyrifos TMDL was adopted by the Regional Water Board on June 23, 2006 (Resolution R5-2006-0061) and became effective on October 10, 2007. The TMDL establishes wasteload allocations (WLAs) for the sum of diazinon and chlorpyrifos concentrations relative to their respective WQOs. Attachment G of the Region-wide Permit requires that, within one year of the receipt of the NOA under the Region-wide Permit, the City and County (as Permittees) must submit an assessment to determine the diazinon and chlorpyrifos levels and attainment of WLAs in urban discharge and WQOs in the receiving water. The Permittees performed this assessment during 2016-2017 and submitted the information with the Assessment and Prioritization of Water Quality Constituents in the Stockton Urbanized Area.<sup>13</sup> The assessment indicated that, with the exception of Duck Creek, the targets and allocations for the TMDL are largely being met. In addition, Calaveras River, Mosher

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<sup>12</sup>[http://www.waterboards.ca.gov/centralvalley/water\\_issues/delta\\_water\\_quality/delta\\_regional\\_monitoring/index.shtml](http://www.waterboards.ca.gov/centralvalley/water_issues/delta_water_quality/delta_regional_monitoring/index.shtml)

<sup>13</sup> City of Stockton and County of San Joaquin. Assessment and Prioritization of Water Quality Constituents in the Stockton Urbanized Area. Prepared by Larry Walker Associates. May 30, 2017.

Slough, and Smith Canal all meet the 303(d) delisting criteria. The Regional Water Board approved the assessment in 2020.<sup>14</sup>

#### **4.4.2 Central Valley Diazinon and Chlorpyrifos TMDL (Resolution No. R5-2014-0041)**

The Central Valley Diazinon and Chlorpyrifos TMDL was adopted by the Regional Water Board on March 28, 2014 (Resolution R5-2014-0041) and became effective on August 16, 2017. The Diazinon and Chlorpyrifos TMDL includes WQOs for diazinon and chlorpyrifos based on the California Department of Fish and Game criteria, which are the existing Basin Plan WQOs applicable to the SUA. The TMDL does not change the existing WLAs for point source dischargers.

#### **4.4.3 Central Valley Pyrethroid Pesticides Basin Plan Amendment and TMDL (Resolution R5-2017-0057)**

The Central Valley Pyrethroid Pesticides Basin Plan Amendment (BPA) and TMDL were adopted by the Regional Water Board on June 8, 2017 (Resolution R5-2017-0057). The BPA became effective on February 19, 2019 and the TMDLs for the nine urban creeks in Sacramento and Roseville became effective on April 22, 2019. The BPA establishes pyrethroid concentration goals and an implementation program to control pyrethroids in the Sacramento and San Joaquin River watersheds and establishes TMDLs for waterbodies that are 303(d) listed for pyrethroids.

The BPA includes requirements for pyrethroid monitoring, a conditional prohibition, and a pyrethroid management plan. These requirements were not yet applicable during 2019-2020 but will be incorporated into the Permittees' upcoming SWMP.

#### **4.4.4 Stockton Urban Water Bodies Pathogen TMDL (Resolution No. R5-2009-0030)**

The Stockton Urban Waterbodies Pathogen TMDL was adopted by the Regional Water Board on March 14, 2008 (Resolution R5-2008-0030) and became effective on May 13, 2008. The TMDL includes WLAs for fecal coliform and *E. coli*. Attachment G of the Region-wide Permit requires that the Permittees continue monitoring and document, in Mid-Term and End-Term Reports, the implementation of BMPs to control the discharge of pathogens (indicator bacteria) in their urban discharge, as well as submit effectiveness assessments of implemented BMPs. These efforts were reported in the *Municipal Stormwater Program 2016-2019 Mid-Term Report*. During 2019-2020, the Permittees monitored for indicator bacteria at Mormon Slough, as described in **Section 4.1.2**. Implementation of BMPs is documented in **Section 5**.

#### **4.4.5 Delta Methylmercury TMDL (Resolution No. R5-2010-0043)**

The Sacramento-San Joaquin Delta Methylmercury TMDL was adopted by the Regional Water Board on April 22, 2010 (Resolution R5-2010-0043) and became effective on October 20, 2011. As a part of Phase I of the TMDL, the City and County conducted a Methylmercury Control

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<sup>14</sup> Central Valley Regional Water Quality Control Board. Sacramento and San Joaquin Delta Diazinon and Chlorpyrifos Total Maximum Daily Load Attainment Assessment, Dated 30 May 2017. 17 April 2020.

Study (Control Study) and participated in the Mercury Exposure Reduction Program (MERP). Progress for the Control Study and MERP participation are reported in the following sections.

#### **4.4.5.1 Methylmercury Control Study**

The Control Study focused on evaluating the mercury and methylmercury removal performance of the Airport Business Center detention basin within the SUA, along with examining the potential for methylmercury production in the basin. The Permittees implemented the Control Study according to the schedule in **Table 14**. The Control Study included monitoring for mercury and methylmercury using grab samples, along with ancillary constituents (i.e., suspended sediment, total suspended solids, total dissolved solids, turbidity, phosphorus, sulfate, and iron) using composite samples, and field readings. Samples were collected at the detention basin inlets and outlet. During dry weather events, sediment samples were collected for mercury and methylmercury. Sampling occurred during three wet weather events and one dry weather event for three years. Monitoring was completed during 2015-2016 and the final report submitted October 20, 2018 and approved by the Regional Water Board on June 19, 2020.

**Table 14. Methylmercury Control Study Schedule**

<b>Task</b>	<b>Estimated Completion</b>	<b>Completed</b>
Submit Control Study Work Plan to Regional Water Board	April 19, 2013	✓
Regional Water Board and TAC Work Plan Review	May-July 2013	✓
Finalize Work Plan	October 21, 2013	✓
Initiate Control Study Sampling <ul style="list-style-type: none"> <li>• First Year Monitoring</li> <li>• Second Year Monitoring</li> <li>• Third Year Monitoring</li> </ul>	October 2013 <ul style="list-style-type: none"> <li>• Oct 2013 – Sep 2014</li> <li>• Oct 2014 – Sep 2015</li> <li>• Oct 2015 – Sep 2016</li> </ul>	✓
Submit Control Study Progress Report	October 2015	✓
Complete Control Study Sampling	September 2016	✓
Submit Annual Progress Report	October 2016 (submitted as part of Annual Report)	✓
Submit Annual Progress Report	October 2018 (submitted as part of Annual Report)	✓
Submit Control Study Final Report to Regional Water Board	October 20, 2018	✓
Regional Water Board Approval of Completion of Final Report	June 19, 2020	✓

#### **4.4.5.2 Delta Mercury Exposure Reduction Program Participation**

The Delta Mercury Control Program requires the entities identified in the Basin Plan to develop and implement a Mercury Exposure Reduction Program (MERP). The Delta MERP participants include those entities and agencies that formally submitted a letter describing their intent to

participate in the collective exposure reduction program. The Permittees submitted their letter during 2013-2014 and are currently participating in the Delta MERP.

The Delta MERP is designed to increase understanding of contaminants in fish and reduce exposure to mercury among people who eat fish from the Delta. The Delta MERP produces educational materials based on fish consumption guidelines, and also focuses on presenting a balanced message, including communicating the health risks associated with exposure to mercury in fish, ways to reduce exposure, and health benefits of eating fish generally, as well as identifying low-mercury fish species and areas. The Delta MERP also focuses efforts on training opportunities for entities involved in the Delta MERP, including county agencies, tribal organizations, community-based organizations, and health care providers.

During 2019-2020, the Permittees contributed funding to the MERP and have been actively tracking its progress.

#### **4.4.6 Lower San Joaquin River, Stockton Deep Water Ship Channel Organic Enrichment and Low Dissolved Oxygen TMDL (Resolution No. R5-2005-0005)**

The Lower San Joaquin River Dissolved Oxygen TMDL was adopted by the Regional Water Board on January 27, 2005 (Resolution R5-2005-0005) and became effective on February 27, 2007. The TMDL requires that responsible parties implement BMPs to control and abate the discharge of oxygen-demanding substances. Attachment G of the Region-wide Permit requires covered Permittees to continue implementation of BMPs identified in their SWMP to control oxygen-demanding substances in their stormwater discharges. These implementation efforts were reported in the *Municipal Stormwater Program 2016-2019 Mid-Term Report* and will also be documented in the End-Term Report, as required under the Region-wide Permit. During 2019-2020 the Permittees monitored for dissolved oxygen at Mormon Slough using grab samples, as described in **Section 4.1.2**. Implementation of BMPs is documented in **Section 5**.

#### **4.4.7 Statewide Trash Amendments**

The Statewide Trash Amendments<sup>15</sup> were adopted by the State Water Resources Control Board on April 7, 2015 (Resolution 2015-0019) and became effective on December 2, 2015. The Trash Amendments require MS4 permittees to comply with the prohibition of trash discharge through Track 1 or Track 2.

The Regional Water Board issued a 13383 Order on June 1, 2017 requiring the City to submit a letter identifying the selected compliance option (Track 1 or Track 2) by September 1, 2017. The City selected the Track 2 compliance method (full capture system equivalency).

The County's jurisdiction includes both Phase I and Phase II areas. As such, the County is subject to two separate stormwater permits: the Region-wide Permit and the Phase II Small Municipal Separate Storm Sewer System (MS4) General Permit<sup>16</sup> (Phase II Permit) issued by the

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<sup>15</sup> Proposed Final Part 1 Trash Provisions of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California (ISWEBE Plan).

<sup>16</sup> Order No. 2013-001-DWQ, effective July 1, 2013



State Water Board. The County received the 13383 Order issued by the Regional Board (June 1, 2017), as well as a 13383 Order issued by the State Water Board (June 1, 2017). The County responded to both orders by selecting the Track 2 approach to compliance and submitted the preliminary jurisdictional maps required for Phase II areas.

The City and County each submitted Trash Implementation Plans<sup>17,18</sup> to the Regional Water Board on December 1, 2018, which include the following:

- a) A description of the combination of controls selected and the rationale for the selection;
- b) The rationale for how the combination of controls is designed to achieve Full Capture System Equivalency (FCSE); and
- c) The rationale for how FCSE will be demonstrated.

As part of the trash monitoring programs, the City and County will collect quantitative data from the implementation of applicable control measures and report the results in future annual reports.

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<sup>17</sup> City of Stockton, 2018. *Statewide Trash Amendments: Track 2 Implementation Plan*. December.

<sup>18</sup> County of San Joaquin, 2018. *Statewide Trash Amendments: Track 2 Implementation Plan*. December.

## 5 Program Implementation

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Consistent with Attachment H to the Region-wide Permit (*Standard Permit Provisions and General Provisions*),<sup>19</sup> this section provides a summary of the status of the implementation of the stormwater program, focusing on the number and nature of enforcement actions, inspections, and public education programs during 2019-2020.

As described in **Section 2** and **Section 7**, the City and County submitted a NOI Work Plan as part of their NOI application package (**Appendix A**). During 2019-2020, the City and County implemented the activities as outlined in the NOI Work Plan.

In addition, throughout each reporting period, the City and County track the data and information necessary to conduct short-term and long-term program effectiveness assessments. The short-term program effectiveness assessment was included in the *Municipal Stormwater Program 2016-2019 Mid-Term Report*. The long-term program effectiveness assessment will be completed as part of the End-Term Report in 2021. Although the information may change from year to year, a summary of the programmatic data and information generally tracked for each stormwater program element is provided in **Table 15**.

On March 19, 2020, the California State Public Health Officer and Director of the California Department of Public Health ordered all individuals living in the State of California to stay home or at their place of residence, except as needed to maintain continuity of operation of the federal critical infrastructure sectors<sup>20</sup> (Executive Order N-33-20). In response to the guidance from the State Water Board, the City and County submitted letters (dated April 7, 2020 and April 28, 2020, respectively) outlining requirements of the Region-wide Permit that might be affected since they would be inconsistent with directives related to COVID-19 and where possible, proposed in-lieu methods to meet the requirements. In their responses to the City and County (dated April 29, 2020 and May 12, 2020, respectively), the Regional Water Board waived in-person public education events and two dry weather monitoring events but did not waive the industrial and commercial inspections. Specific impacts, if any, to meeting the requirements are identified within this section. The letters and Regional Water Board response letters are included as **Appendix E**.

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<sup>19</sup> Attachment H includes applicable provisions from 40 CFR §122.41 and 40 CFR §122.42.

<sup>20</sup> <https://covid19.ca.gov/stay-home-except-for-essential-needs/>

**Table 15. Data and Information Tracked Annually for Each Program Element**

<b>Data/Information Tracked Annually (by Program Element)</b>	
<b>Program Management</b>	Fiscal Analysis (i.e., current NPDES expenditures, projected expenditures for the next fiscal year)
<b>Illicit Discharges (ID)</b>	Number of water pollution complaints received/verified and source of complaints Number of water pollution issues observed/verified by field staff Number of illegal connections reported/verified/eliminated Types of materials involved in the verified incidents Location of illicit discharges (Illicit Discharges Location Map) Number/types enforcement actions taken for illicit discharges and illegal connections Training sessions held; pre- and post-training survey results
<b>Public Outreach (PO)</b>	Summary of stream cleanup events, volunteer organizations, and number of volunteers Amount used oil and household hazardous waste collected Number hotline calls received/verified Number educational materials distributed Summary of installation of pet waste bag dispensing stations Number/types mixed media campaigns conducted Summary of community-wide events Summary of events held for school-age children
<b>Municipal Operations (MO)</b>	Summary of sanitary sewer overflows Information about municipal Capital Improvement Projects (CIPs)/Priority Project status Number acres treated with fertilizers; amount applied Number acres treated with pesticides Number acres under IPM program Total pesticide use (by active ingredient, when available) at parks/golf courses/detention basins Information regarding catch basin prioritization/inspection/cleaning; overall storm drain system Information regarding pump station inspection/cleaning; overall pump station maintenance Number of catch basins stenciled Number events required to obtain special use permits and address trash and debris removal Total street miles swept, amount debris removed, and amount green waste collected Training sessions held; pre- and post-training survey results
<b>Industrial and Commercial (IC)</b>	Number industrial facilities Number commercial facilities (significant sources) by category Number/results industrial facility inspections conducted Number/results commercial facility inspections conducted Number/results follow-up inspections conducted Mobile business Self-Certifications mailed/received Number BMP Fact Sheets distributed during inspections Number/types enforcement actions taken during inspections/illicit discharge responses

<b>Data/Information Tracked Annually (by Program Element)</b>
Number/causes referrals made to Regional Water Board due to illicit discharge violations
Number/types enforcement steps taken related to Self-Certification Forms
Number/types enforcement actions taken against carpet cleaners
Training sessions held; pre- and post-training survey results
<b>Construction (CO)</b>
Number grading permits issued; number requiring SWPPPs and NOIs
Number private/public construction sites; number requiring SWPPP; number completed
Number/type outreach materials distributed during inspections
Number active construction sites; number regular/follow-up inspections conducted
Number/types of enforcement actions taken
Training sessions held; pre- and post-training survey results
<b>Planning and Land Development (LD)</b>
Number project plans reviewed for stormwater BMPs
Number Priority Projects, by Category
Total acreage covered by approved Priority Projects
Number/Type approved Control Measures
Information for permanent post-construction stormwater treatment devices (Post-Construction BMP
Completed priority projects/post-construction BMP maintenance oversight inspection results
Number stormwater treatment device access and maintenance agreements executed
Training sessions held; pre- and post-training survey results

## 5.1 CITY PROGRAM IMPLEMENTATION

### 5.1.1 Inspections (City)

#### 5.1.1.1 Industrial and Commercial Program Element (IC)

The City prioritizes all industrial facilities, and commercial facilities that may be significant sources of pollutants, as high priority and inspects each facility twice during the five-year permit term. The inspection results for industrial facilities in 2019-2020 are shown in **Table 16**.

**Table 16. Summary of Industrial Inspections (City)**

Data/Information Tracked	Total Number
Industrial facilities in current inventory	127
Facilities prioritized as high	127
Facilities inspected during the reporting period <sup>[a]</sup>	2
Facilities with SWPPPs on site <sup>[b]</sup>	2
Facilities in compliance with stormwater control requirements <sup>[c]</sup>	0
Facilities requiring follow-up inspections	2
Facilities in compliance after follow-up inspections	1

[a] During 2019-2020, the City updated its inventory, then inspected newly identified facilities that had not been inspected during the previous two fiscal years. Beginning in 2020-2021, the City plans to inspect all inventoried facilities annually to meet the requirements of SB 205.

[b] The number of facilities with SWPPPs on site is tabulated as the total number of facilities minus the number with "SWPPP not on site" written in the inspector comments.

[c] In 2017-2018, City inspectors initiated the use of a defined checklist to determine whether an industrial facility passed its initial inspection. The number of facilities in compliance with stormwater control requirements is tabulated as the total number of facilities minus the number which failed the initial inspection.

The inspection results for commercial facilities in 2019-2020 are shown in **Table 17**.

**Table 17. Summary of Commercial Inspections (City)**

Data/Information Tracked	Total Number
Commercial facilities in current inventory (significant sources)	1,292
Facilities prioritized as high	1,292
Facilities inspected during the reporting period	338 <sup>[a]</sup>
Facilities requiring follow-up inspections	4
Facilities in compliance after follow-up inspections	4

[a] The City attempted to inspect an additional 27 commercial facilities; however, the facilities were closed due to COVID restrictions, and a full inspection could not be performed.

#### **5.1.1.2 Construction Program Element (CO)**

The City inspects all construction sites greater than or equal to one (1) acre during the wet and dry seasons. The inspection program ensures that the specific minimum requirements are effectively implemented at construction sites.

A summary of the active construction sites and inspections conducted by the City in 2019-2020 is shown in **Table 18**.

**Table 18. Summary of Construction Site Inspections (City)**

Data/Information Tracked	Total Number
Active construction sites $\geq 1$ acre in size <sup>[a]</sup>	87
Regular inspections conducted at active construction sites	563
Follow-up inspections conducted due to violations <sup>[b]</sup>	48

[a] The number of active construction sites includes sites which were active at any time during the fiscal year.

[b] Follow-up inspections were performed at 27 construction sites.

### 5.1.1.3 Planning and Land Development Program Element (LD)

The City performs post-construction BMP maintenance oversight to ensure that post-construction BMPs continue to function correctly and minimize water quality impacts. The number of completed priority projects with post-construction BMPs and the number of inspections conducted in 2019-2020 are shown in **Table 19**.

**Table 19. Post-Construction BMP Inspections and Enforcement (City)**

Data/Information Tracked	Total Number
Completed priority projects with post-construction BMPs	26
Inspections conducted	0 <sup>[a]</sup>

[a] During 2019-2020, the program was being modified to address the Trash Amendments and general issues that have arisen over the years. Regular post-construction inspections are anticipated to begin in 2020-2021.

## 5.1.2 Enforcement (City)

### 5.1.2.1 Illicit Discharges Program Element (ID)

The Enforcement Control Measure establishes policies and procedures and outlines the progressive levels of enforcement applied to responsible parties not complying with City ordinances. By adopting and implementing a progressive enforcement policy, the City ensures that the program is effective at reducing illicit discharges and illegal connections. The City tracked enforcement actions in the Illicit Discharges Database.

The number and types of enforcement actions taken by the City during 2019-2020 are summarized in **Table 20**.

**Table 20. Illicit Discharge Program Enforcement Actions Taken (City)**

Type of Enforcement Action	Number of Actions <sup>[a]</sup>
Verbal Warning	0
<b>Administrative</b>	
Violation Warning Notice	4
Notice of Violation	7
Cease and Desist Order	3
Stop Work Order	0
Administrative Citation (Fine)	0
<b>Criminal Enforcement<sup>[b]</sup></b>	
Misdemeanor	0
Infraction	0
<b>Total</b>	<b>14</b>

[a] The total number of enforcement actions taken may be smaller than the number of verified incidents due to enforcement actions issued to the owners of multiple properties.

[b] This category presumes that an action turned over to the District Attorney resulted in a criminal prosecution within the year of the incident. However, data for this category can only be updated in subsequent years (i.e., after criminal prosecution has been successful).

One repeat offender was identified, and no referrals were made to the Regional Water Board by the City during 2019-2020.

#### 5.1.2.2 Industrial and Commercial Program Element (IC)

The Enforcement Control Measure outlines the progressive levels of enforcement applied to industrial and commercial facilities that are out of compliance with local ordinances and establishes the protocol for referring apparent violations of facilities subject to the Industrial General Permit to the Regional Water Board.

The number and types of enforcement actions taken by the City during 2019-2020 are summarized in **Table 21**.

**Table 21. Industrial and Commercial Program Enforcement Actions Taken (City)**

Type of Enforcement Action	Number of Actions <sup>[a]</sup>
<b>Administrative</b>	
Violation Warning Notice	0
Notice of Violation	2 <sup>[b]</sup>
Cease and Desist Order	0
Stop Work Order	0
Administrative Citation (Fine)	0
<b>Criminal Enforcement<sup>[c]</sup></b>	
Misdemeanor	0
Infraction	0
<b>Total</b>	<b>2</b>

[a] The total number of enforcement actions taken may be smaller than the number of facilities with inadequate BMPs due to enforcement actions that are issued to the owners of multiple properties.

[b] The total number of enforcement actions taken is smaller than the number of follow-up inspections (6) for identified issues due to multiple inspections being conducted per NOV.

[c] This category presumes that an action turned over to the District Attorney resulted in a criminal prosecution within the year of the incident. However, data for this section can only be updated in subsequent years (i.e., after criminal prosecution has been successful).

No repeat offenders were identified, but one referral was made to the Regional Water Board by the City during 2019-2020.

#### 5.1.2.3 Construction Program Element (CO)

The Enforcement Control Measure outlines the progressive levels of enforcement applied to construction sites that are out of compliance with local ordinances and establishes the protocol for referring apparent violations of construction sites subject to the General Construction Permit to the Regional Water Board. The progressive enforcement and referral policy, as well as the accompanying legal authority to execute this policy, is an important tool for providing a fair and equitable approach to bringing contractors and developers into compliance with the City's municipal code requirements.

The number and types of enforcement actions taken by the City in 2019-2020 during construction site inspections are summarized in **Table 22**.



**Table 22. Construction Program Enforcement Actions Taken (City)**

Type of Enforcement Action	Number of Actions
Verbal Warning	0
<b>Administrative</b>	
Violation Warning Notice	65
Notice of Violation	26
Cease and Desist Order	0
Stop Work Order	2
Administrative Citation (Fine)	1
<b>Criminal Enforcement</b>	
Misdemeanor	0
Infraction	0
<b>Total</b>	<b>94</b>

[a] In 2016-2017, the Notice of Violation (NOV) form used by the City includes the following enforcement options: Cease and Desist Order; Violation Warning Notice; Notice to Clean; Stop Work Order; Fine; and Correction Order.

Twelve (12) repeat offenders (i.e., unique construction sites) were identified, and no referrals were made to the Regional Water Board by the City during 2019-2020.

#### **5.1.2.4 Planning and Land Development Program Element (LD)**

The City performs post-construction BMP maintenance oversight to ensure that post-construction BMPs continue to function correctly and minimize water quality impacts. No enforcement actions were taken in 2019-2020.

### 5.1.3 Public Education (City)

#### 5.1.3.1 Public Outreach Program Element (PO)

The City implemented a number of public education and outreach programs during the 2019-2020 reporting period. A summary of these efforts is provided below.

- **Identify and/or Create, Revise, and Distribute Educational Materials:** The City distributed 3,150 educational materials, including brochures and fact sheets, to the general public.
- **Conduct Mixed Media Campaigns:** The City conducted three (3) mixed media campaigns for the general public which reached an estimated total of 124,047 people. These efforts included a video promoting storm drain marker installation that aired regularly on Channel 97 and a cable television channel devoted to the Stockton City government, outfield signage at the Stockton Ports Baseball stadium, and broadcast of a storm drain marker educational video on the City of Stockton YouTube channel.
- **Participate in Community-Wide Events:** The City conducted two (2) community-wide events (prior to COVID shelter-in-place requirements) with an estimated 18,000 total attendees.
- **Reach Out to School Age Children:** SAWS held 240 events at Stockton area schools, reaching an estimated 8,280 students. The City held an additional three events for children, including a children's festival and two field trips, which reached 5,300 students. In all, a total of 13,580 students were reached.
- **Distribute Educational Material to Selected Businesses:** The City distributed 400 educational materials to high-priority commercial businesses.

## 5.2 COUNTY PROGRAM IMPLEMENTATION

### 5.2.1 Inspections (County)

#### 5.2.1.1 Industrial and Commercial Program Element (IC)

The County prioritizes all industrial facilities, and commercial facilities that may be significant sources of pollutants, as high priority and inspects each facility twice during the five-year permit term. The inspection results for industrial facilities in 2019-2020 are shown in **Table 23**.

**Table 23. Summary of Industrial Inspections (County)**

Data/Information Tracked	Total Number
Industrial facilities in current inventory	14
Facilities prioritized as high	14
Facilities inspected during the reporting period <sup>[a]</sup>	0
Facilities with SWPPPs on site	N/A
Facilities in compliance with stormwater control requirements	N/A
Facilities requiring follow-up inspections	N/A

[a] Typically, the County maintains an annual presence in the field by inspecting a percentage of industrial facilities annually, resulting in all facilities being inspected at least twice during a five-year permit term. Since 2016-2017, the County has inspected a portion of the total facilities each year (5 of 16 in 2016-2017; 7 of 14 in 2017-2018; and 8 of 14 in 2018-2019); thus, the County is on track to inspect each facility twice during the five-year permit term. The County's inspection efforts in Spring 2020 were interrupted by COVID-19 and will resume in 2020-2021 with a new prioritization schedule.

The inspection results for commercial facilities in 2019-2020 are shown in **Table 24**.

**Table 24. Summary of Commercial Inspections (County)**

<b>Data/Information Tracked</b>	<b>Total Number</b>
Commercial facilities in current inventory (significant sources)	150
Facilities prioritized as high	150
Facilities inspected during the reporting period	150
Facilities requiring follow-up inspections	11
Facilities in compliance after follow-up inspections	11

In past years, as part of the commercial business inventory and inspection efforts, and on behalf of both Permittees, the County has implemented and tracked the Self-Certification program for mobile carpet cleaning businesses. Although not conducted during 2019-2020, the County intends to implement this program in 2020-2021.

#### **5.2.1.2 Construction Program Element (CO)**

The County inspects all construction sites greater than or equal to one (1) acre during the wet and dry seasons. The inspection program ensures that the specific minimum requirements are effectively implemented at construction sites. The County had one active constructions site within the Phase I area greater than or equal to one acre in size in 2019-2020.

### 5.2.1.3 Planning and Land Development Program Element (LD)

The County performs post-construction BMP maintenance oversight to ensure that post-construction BMPs continue to function correctly and minimize water quality impacts. The number of completed priority projects with post-construction BMPs and the number of inspections conducted in 2019-2020 are shown in **Table 25**.

**Table 25. Post-Construction BMP Inspections and Enforcement (County)**

Data/Information Tracked	Total Number
Completed priority projects with post-construction BMPs	0
Inspections conducted <sup>[a]</sup>	0

[a] One (1) project completed prior to FY 2019/2020 was inspected on August 19, 2020 and will be included with the FY 2020/2021 inspection data.

## 5.2.2 Enforcement (County)

### 5.2.2.1 Illicit Discharge Program Element (ID)

The Enforcement Control Measure establishes policies and procedures and outlines the progressive levels of enforcement applied to responsible parties not complying with County ordinances. By adopting and implementing a progressive enforcement policy, the County ensures that the program is effective at reducing illicit discharges and illegal connections. The County tracked enforcement actions in the Illicit Discharges Database.

The number and types of enforcement actions taken by the County during 2019-2020 are summarized in **Table 26**.

**Table 26. Illicit Discharge Program Enforcement Actions Taken (County)**

Type of Enforcement Action	Number of Actions
Verbal Warning	0
<b>Administrative</b>	
Correction Order	0
Notice of Violation	0
Notice to Clean	1
Administrative Citation (Fine)	0
<b>Criminal Enforcement<sup>[a]</sup></b>	
Misdemeanor	0
Infraction	0
<b>Total</b>	<b>1</b>

[a] This category presumes that an action turned over to the District Attorney resulted in a criminal prosecution within the year of the incident. However, data for this category can only be updated in subsequent years (i.e., after criminal prosecution has been successful).

There were no repeat offenders identified or referrals made to other agencies by the County during 2019-2020.

### 5.2.2.2 Industrial and Commercial Program Element (IC)

The Enforcement Control Measure outlines the progressive levels of enforcement applied to industrial and commercial facilities that are out of compliance with local ordinances and establishes the protocol for referring apparent violations of facilities subject to the Industrial General Permit to the Regional Water Board.

The number and types of enforcement actions taken by the County in 2019-2020 are summarized in **Table 27**.

**Table 27. Industrial and Commercial Program Enforcement Actions Taken (County)**

Type of Enforcement Action	Number of Actions <sup>[a]</sup>
<b>Administrative Remedies</b>	
Verbal Warnings	11
Warning or Notice to Clean	0
Notice of Violation	0
<b>Legal Action</b>	
Misdemeanor	0
Infraction	0
<b>Total</b>	<b>11</b>

### 5.2.2.3 Construction Program Element (CO)

The Enforcement Control Measure outlines the progressive levels of enforcement applied to construction sites that are out of compliance with local ordinances and establishes the protocol for referring apparent violations of construction sites subject to the General Construction Permit to the Regional Water Board. The progressive enforcement and referral policy, as well as the accompanying legal authority, is an important tool for ensuring a fair and equitable approach to bringing contractors and developers into compliance with the County Code and ordinance requirements. No enforcement actions were taken during 2019-2020.

### 5.2.2.4 Planning and Land Development Program Element (LD)

The County performs post-construction BMP maintenance oversight to ensure that post-construction BMPs continue to function correctly and minimize water quality impacts. No enforcement actions were taken by the County in 2019-2020.

### **5.2.3 Public Education (County)**

#### **5.2.3.1 Public Outreach Program Element (PO)**

The County implemented a number of public education and outreach programs during the 2019-2020 reporting period. A summary of these efforts is provided below.

- **Identify and/or Create, Revise, and Distribute Educational Materials:** The County distributed a total of 480 educational materials, including data cards, posters, and flyers to the general public.
- **Conduct Mixed Media Campaigns:** The County conducted four (4) mixed media campaigns for the general public. These efforts included radio advertisements in English and Spanish during May and June 2020, radio public service announcements and a video advertisement. An estimated total of 581,009 impressions were made through these campaigns.
- **Participate in Community-Wide Events:** The County conducted a total of two (2) community-wide events with an estimated 399 total attendees. An estimated total of 65 impressions were made during these events.
- **Reach Out to School Age Children:** SAWS held 246 events at schools, reaching an estimated 16,115 students.
- **Distribute Educational Material to Selected Businesses:** The County did not distribute any educational materials to high-priority commercial businesses in 2019-2020; this effort will resume in 2020-2021 in conjunction with commercial facility inspections.



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## **6 Proposed SWMP Modifications**

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As a part of the annual reporting process, the City and the County have qualitatively evaluated the effectiveness of the stormwater program during the Permit term, as well as the experience that staff has had in implementing the program, to identify potential modifications.

The City and the County previously identified key program modifications in the June 2012 ROWD. These modifications will be incorporated into the revised SWMP and corresponding Work Plan prior to the submittal to the Regional Water Board (anticipated in 2020-2021).

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# **Appendix A**

## **NOI Work Plan**

**as submitted November 1, 2016**

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## City of Stockton and County of San Joaquin SWMP Annual Work Plan

ID	Task Name	Q3	Q4	Q1	Q2
1	<b>Section 1 - Program Management</b>				
2	<b>Program Coordination</b>				
3	Review/revise SWMP as needed				
4	Co-permittees meet quarterly				
5	Participate in internal quarterly Stormwater Program Meetings				
6	Participate in statewide stormwater-related meetings, conferences, and stakeholder groups as needed				
7	Review/revise MOUs as necessary				
8	Establish, review, and revise cooperative agreements as needed				
9	<b>Fiscal Analysis</b>				
10	Review and revise the Fiscal Analysis reporting format as needed				
11	<b>Legal Authority</b>				
12	Review the legal authority as needed				

## City of Stockton and County of San Joaquin SWMP Annual Work Plan

ID	Task Name	Q3	Q4	Q1	Q2
13	<b>Section 2 - Illicit Discharges Program Element (ID)</b>				
14	<b>ID1 - Detection of Illicit Discharges and Illegal Connections</b>				
15	Public Reporting				
16	Maintain and advertise Hotline				
17	Coordinate with other agencies and departments				
18	Field Crew Inspections				
19	Continue field observations for IDIC				
20	<b>ID2 - Illegal Connection Identification and Elimination</b>				
21	Investigate and eliminate illegal connections				
22	Coordinate with Planning and Land Development program				
23	Coordinate with Construction program				
24	<b>ID3 - Investigation/Inspection and Follow Up</b>				
25	Respond to illicit discharges				
26	Maintain contractual services for incident clean-up				
27	Maintain Illicit Discharges Database				
28	<b>ID4 - Enforcement</b>				
29	Implement progressive enforcement policy and procedures				
30	Track enforcement actions in Illicit Discharges Database				
31	<b>ID5 - Training</b>				
32	Conduct training				

## City of Stockton and County of San Joaquin SWMP Annual Work Plan

ID	Task Name	Q3	Q4	Q1	Q2
33	<b>Section 3 - Public Outreach (PO)</b>				
34	<b>PO1 - Public Participation</b>				
35	Implement Storm Drain Marker Program				
36	Organize, support, and/or participate in stream cleanup events				
37	Promote Used Oil and Household Hazardous Waste Programs				
38	Coordinate with Household Hazardous Waste program for pesticide disposal				
39	<b>PO2 - Hotline</b>				
40	Maintain 24-hr hotline number				
41	Promote/publicize the 24-hr hotline				
42	<b>PO3 - Public Outreach Implementation</b>				
43	Update Website as needed				
44	Implement pet waste outreach program				
45	Track installation of pet waste bag dispensing stations				
46	Participate in community-wide events throughout the year				
47	Conduct mixed media campaigns				
48	Provide community relations				
49	Implement pesticide outreach efforts for staff, residents, retail stores, and PCOs				
50	<b>PO4 - Public School Education</b>				
51	Continue to identify opportunities to reach out to school age children				



## City of Stockton and County of San Joaquin SWMP Annual Work Plan

ID	Task Name	Q3	Q4	Q1	Q2
52	<b>Section 4 - Municipal Operations (MO)</b>				
53	<b>MO1 - Sanitary Sewer Maintenance &amp; Overflow and Spill Response</b>				
54	Implement the Sanitary Sewer Overflow Emergency Response Plan (SSOERP)				
55	Review the SSOERP and revise as changes occur				
56	<b>MO2 - Construction Requirements for Municipal Capital Improvement Projects</b>				
57	Review CIP designs to ensure specifications and notes are included				
58	Require submission of NOI for CIPs greater than or equal to one acre				
59	If a priority project, develop in conformance with the SWQCCP				
60	Improve interdepartmental communication to facilitate accurate recordkeeping and reporting of data				
61	<b>MO3 - Pollution Prevention at City Facilities</b>				
62	Assess facilities to determine if they require coverage under the General Industrial Permit				
63	Implement SWPPP/FPPP for Corporation Yard and other facilities as needed				
64	Review CIP projects for compliance with general stormwater requirements, including review for vehicle or equipment wash areas				
65	<b>MO4 - Landscape and Pest Management</b>				
66	Implement pesticide and fertilizer application protocol at park sites, landscaped medians, and golf courses				
67	Implement IPM program				
68	Maintain and expand internal inventory on pesticide use and track Parks Division reported pesticide use				
69	Implement Landscaping Standards				
70	<b>MO5 - Storm Drain System Maintenance</b>				
71	Implement storm drain system mapping				
72	Review/revise prioritization for catch basin cleaning as needed				
73	Maintain and annually update Catch Basin Database				
74	Implement catch basin maintenance program				
75	Implement pump station maintenance program				
76	Implement detention basin maintenance program				
77	Implement notification procedures for ID/IC and missing catch basin markers or illegible stencils				
78	Require large events and venues to address trash and debris removal, including containerization and street sweeping as appropriate				

## City of Stockton and County of San Joaquin SWMP Annual Work Plan

ID	Task Name	Q3	Q4	Q1	Q2
79	<b>MO6 - Street Cleaning and Maintenance</b>				
80	Implement street sweeping program				
81	Review/revise prioritization of streets for street sweeping program as needed				
82	Implement green waste collection program				
83	Implement Maintenance Staff Guide -- Road Maintenance and Small Construction BMPs				
84	<b>MO7 - Training</b>				
85	Conduct training				
86	<b>Section 5 - Industrial and Commercial Program Element (IC)</b>				
87	<b>IC1 - Facility Inventory</b>				
88	Internal audit of database				
89	Maintain and annually update the inventory and database				
90	Map the industrial and commercial facilities on an annual basis				
91	Implement and track a self-certification program for carpet cleaners				
92	<b>IC2 - Prioritization and Inspection</b>				
93	Prioritization				
94	Prioritize facilities as necessary				
95	Inspections				
96	Review/revise industrial inspection checklists as needed				
97	Conduct inspections				
98	Conduct follow-up inspections as needed				
99	<b>IC3 - BMP Implementation</b>				
100	Review/revise BMP fact sheets for high priority facilities as needed				
101	Distribute BMP Fact Sheets				
102	Implement outreach efforts to carpet cleaners				
103	<b>IC4 - Enforcement</b>				
104	Implement progressive enforcement and referral policy and procedures				
105	Track enforcement actions in the industrial/commercial database				
106	Implement procedures for Regional Water Board based complaints				
107	Review and Revise Industrial General Permit referral policy as needed				
108	<b>IC5 - Training</b>				
109	Conduct training				

## City of Stockton and County of San Joaquin SWMP Annual Work Plan

ID	Task Name	Q3	Q4	Q1	Q2
110	<b>Section 6 - Construction (CO)</b>				
111	<b>CO1 - Municipal Code for Construction Sites</b>				
112	<b>CO2 - Plan Review and Approval Process</b>				
113	Review grading and building permit applications for SWPPP requirements				
	Review erosion control plans				
114	Distribute the Plan & Permit Application Review Procedure handout				
115	<b>CO3 - Construction Projects Inventory</b>				
116	Maintain and update the Construction Project Database				
117	<b>CO4 - Construction Outreach</b>				
118	Distribute appropriate BMP fact sheets during inspections				
119	<b>CO5 - Construction Site Inspections &amp; BMP Implementation</b>				
120	Inspect construction sites $\geq 1$ acre monthly				
121	<b>CO6 - Enforcement</b>				
122	Implement progressive enforcement policy				
123	Track enforcement actions using the construction database				
124	<b>CO7 - Training</b>				
125	Conduct training				

# City of Stockton and County of San Joaquin SWMP Annual Work Plan

ID	Task Name	Q3	Q4	Q1	Q2
126	<b>Section 7 - Planning and Land Development (LD)</b>				
127	<b>LD1 - Incorporation of Water Quality Protection Principles into City Procedures and Policies</b>				
128	Revise General Plan as needed				
129	<b>LD2 - New Development Standards</b>				
130	Require priority projects to comply with the revised SWQCCP				
131	<b>LD3 - Plan Review Sign-off</b>				
132	Revise Post-Construction Plan Review Database as needed				
133	Use Post-Construction Plan Review Database				
134	Review project plans and grading plans for stormwater BMPs				
135	Track projects with post-construction treatment control BMPs				
136	Conduct inspections of completed priority projects to ensure that all approved control measures have been implemented and are being maintained				
137	<b>LD4 - Maintenance Agreement and Transfer</b>				
138	Require Stormwater Treatment Device Access and Maintenance Agreement				
139	Implement Post-Construction BMP Maintenance Oversight Protocols				
140	<b>LD5 - Training</b>				
141	Conduct training				
142	<b>Section 8 - Monitoring and Reporting Program</b>				
143	<b>Water Quality Monitoring (waterbody varies annually)</b>				
144	Water quality parameters as needed				
145	Sediment toxicity and sediment chemistry as needed				
146	Water column toxicity as needed				
147	<b>Delta Regional Monitoring Program</b>				
148	<b>Section 9 - Program Implementation, Evaluation, and Reporting</b>				
149	<b>Program Implementation</b>				
150	Update Work Plan as needed				
151	<b>Annual Report</b>				

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# **Appendix B**

## **2019-2020 Monitoring Results**

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**City of Stockton and County of San Joaquin  
Ambient Monitoring Program 2019-2020 Data**

Event	Site Code	Date Sampled	Analyte	Analytical Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
DW39	MR-2D	8/27/19	E. Coli	SM 9223B	<	1		1	MPN/100ml		FGL Env.	8/27/19	8/28/19
SE71	MR-2D	11/26/19	E. Coli	SM 9223B (Colilert)	>	2420		1	MPN/100ml		GeoAnalytical	11/27/19	
SE72	MR-2D	1/9/20	E. Coli	SM 9223B	=	24.9		1	MPN/100ml		FGL Env.	1/9/20	1/10/20
DW41	MR-2D	2/5/20	E. Coli	SM 9223B	=	3.1		1	MPN/100ml		FGL Env.	2/5/20	2/6/20
SE73	MR-2D	3/15/20	E. Coli	SM 9223B	=	14136		1	MPN/100ml		FGL Env.	3/15/20	3/16/20
DW42	MR-2D	4/27/20	E. Coli	SM 9223B	=	31		10	MPN/100ml		FGL Env.	4/27/20	4/28/20
DW43	MR-2D	6/2/20	E. Coli	SM 9223B	>	24196		10	MPN/100ml		FGL Env.	6/2/20	6/3/20
DW39	MR-2R	8/27/19	E. Coli	SM 9223B	=	32.8		1	MPN/100ml		FGL Env.	8/27/19	8/28/19
SE72	MR-2R	1/9/20	E. Coli	SM 9223B	=	143.9		1	MPN/100ml		FGL Env.	1/9/20	1/10/20
DW41	MR-2R	2/5/20	E. Coli	SM 9223B	=	167		1	MPN/100ml		FGL Env.	2/5/20	2/6/20
SE73	MR-2R	3/15/20	E. Coli	SM 9223B	=	8164		1	MPN/100ml		FGL Env.	3/15/20	3/16/20
DW42	MR-2R	4/27/20	E. Coli	SM 9223B	=	609		10	MPN/100ml		FGL Env.	4/27/20	4/28/20
DW43	MR-2R	6/2/20	E. Coli	SM 9223B	=	19863		10	MPN/100ml		FGL Env.	6/2/20	6/3/20
DW39	Orange Sonora	8/27/19	E. Coli	SM 9223B	=	83.6		1	MPN/100ml		FGL Env.	8/27/19	8/28/19
DW40	MM-142	9/26/19	E. Coli	SM 9223B	=	1259		10	MPN/100ml		FGL Env.	9/26/19	9/27/19
SE71	MM-142	11/26/19	E. Coli	SM 9223B (Colilert)	=	1000		1	MPN/100ml		GeoAnalytical	11/27/19	
SE72	MM-142	1/9/20	E. Coli	SM 9223B	=	123.6		1	MPN/100ml		FGL Env.	1/9/20	1/10/20
DW41	MM-142	2/5/20	E. Coli	SM 9223B	=	3.1		1	MPN/100ml		FGL Env.	2/5/20	2/6/20
SE73	MM-142	3/15/20	E. Coli	SM 9223B	>	24196		1	MPN/100ml		FGL Env.	3/15/20	3/16/20
DW42	MM-142	4/27/20	E. Coli	SM 9223B	=	295		10	MPN/100ml		FGL Env.	4/27/20	4/28/20
DW43	MM-142	6/2/20	E. Coli	SM 9223B	=	820		10	MPN/100ml		FGL Env.	6/2/20	6/3/20
DW39	MR-4R	8/27/19	E. Coli	SM 9223B	=	45		1	MPN/100ml		FGL Env.	8/27/19	8/28/19
DW40	MR-4R	9/26/19	E. Coli	SM 9223B	=	884		10	MPN/100ml		FGL Env.	9/26/19	9/27/19
SE71	MR-4R	11/26/19	E. Coli	SM 9223B (Colilert)	=	1700		1	MPN/100ml		GeoAnalytical	11/27/19	
SE72	MR-4R	1/9/20	E. Coli	SM 9223B	=	20.3		1	MPN/100ml		FGL Env.	1/9/20	1/10/20
DW41	MR-4R	2/5/20	E. Coli	SM 9223B	=	21.8		1	MPN/100ml		FGL Env.	2/5/20	2/6/20
SE73	MR-4R	3/15/20	E. Coli	SM 9223B	=	158		1	MPN/100ml		FGL Env.	3/15/20	3/16/20
DW42	MR-4R	4/27/20	E. Coli	SM 9223B	=	52		10	MPN/100ml		FGL Env.	4/27/20	4/28/20
DW43	MR-4R	6/2/20	E. Coli	SM 9223B	=	2613		10	MPN/100ml		FGL Env.	6/2/20	6/3/20
DW39	MR-2D	8/27/19	Fecal Coliform	SM 9221B	=	40		18	MPN/100ml		FGL Env.	8/27/19	8/31/19
SE71	MR-2D	11/26/19	Fecal Coliform	SM 9221B, C, E	=	350000		1.8	MPN/100ml		GeoAnalytical	11/27/19	
SE72	MR-2D	1/9/20	Fecal Coliform	SM 9221B	=	490		18	MPN/100ml		FGL Env.	1/9/20	1/12/20
DW41	MR-2D	2/5/20	Fecal Coliform	SM 9221B	=	110		18	MPN/100ml		FGL Env.	2/5/20	2/8/20
SE73	MR-2D	3/15/20	Fecal Coliform	SM 9221B	=	21000		18	MPN/100ml		FGL Env.	3/15/20	3/18/20
DW42	MR-2D	4/27/20	Fecal Coliform	SM 9221B	=	130		18	MPN/100ml		FGL Env.	4/27/20	4/30/20
DW43	MR-2D	6/2/20	Fecal Coliform	SM 9221B	=	330000		18	MPN/100ml		FGL Env.	6/2/20	6/4/20
DW39	MR-2R	8/27/19	Fecal Coliform	SM 9221B	=	2300		180	MPN/100ml		FGL Env.	8/27/19	8/30/19
SE72	MR-2R	1/9/20	Fecal Coliform	SM 9221B	=	3300		180	MPN/100ml		FGL Env.	1/9/20	1/13/20
DW41	MR-2R	2/5/20	Fecal Coliform	SM 9221B	=	3300		180	MPN/100ml		FGL Env.	2/5/20	2/8/20



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Event	Site Code	Date Sampled	Analyte	Analytical Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
SE73	MR-2R	3/15/20	Fecal Coliform	SM 9221B	=	63000		180	MPN/100ml		FGL Env.	3/15/20	3/17/20
DW42	MR-2R	4/27/20	Fecal Coliform	SM 9221B	=	700		18	MPN/100ml		FGL Env.	4/27/20	4/30/20
DW43	MR-2R	6/2/20	Fecal Coliform	SM 9221B	=	23000		18	MPN/100ml		FGL Env.	6/2/20	6/5/20
DW39	Orange Sonora	8/27/19	Fecal Coliform	SM 9221B	=	7900		180	MPN/100ml		FGL Env.	8/27/19	8/31/19
DW40	MM-142	9/26/19	Fecal Coliform	SM 9221B	=	260		18	MPN/100ml		FGL Env.	9/26/19	9/29/19
SE71	MM-142	11/26/19	Fecal Coliform	SM 9221B, C, E	=	280000		1.8	MPN/100ml		GeoAnalytical	11/27/19	
SE72	MM-142	1/9/20	Fecal Coliform	SM 9221B	=	13000		180	MPN/100ml		FGL Env.	1/9/20	1/13/20
DW41	MM-142	2/5/20	Fecal Coliform	SM 9221B	=	40		18	MPN/100ml		FGL Env.	2/5/20	2/8/20
SE73	MM-142	3/15/20	Fecal Coliform	SM 9221B	=	33000		180	MPN/100ml		FGL Env.	3/15/20	3/18/20
DW42	MM-142	4/27/20	Fecal Coliform	SM 9221B	=	1300		18	MPN/100ml		FGL Env.	4/27/20	4/30/20
DW43	MM-142	6/2/20	Fecal Coliform	SM 9221B	=	3300		18	MPN/100ml		FGL Env.	6/2/20	6/4/20
DW39	MR-4R	8/27/19	Fecal Coliform	SM 9221B	=	4900		180	MPN/100ml		FGL Env.	8/27/19	8/31/19
DW40	MR-4R	9/26/19	Fecal Coliform	SM 9221B	=	2200		18	MPN/100ml		FGL Env.	9/26/19	9/29/19
SE71	MR-4R	11/26/19	Fecal Coliform	SM 9221B, C, E	=	9200		1.8	MPN/100ml		GeoAnalytical	11/27/19	
SE72	MR-4R	1/9/20	Fecal Coliform	SM 9221B	=	790		18	MPN/100ml		FGL Env.	1/9/20	1/12/20
DW41	MR-4R	2/5/20	Fecal Coliform	SM 9221B	=	4900		180	MPN/100ml		FGL Env.	2/5/20	2/8/20
SE73	MR-4R	3/15/20	Fecal Coliform	SM 9221B	=	790		18	MPN/100ml		FGL Env.	3/15/20	3/18/20
DW42	MR-4R	4/27/20	Fecal Coliform	SM 9221B	=	68		18	MPN/100ml		FGL Env.	4/27/20	5/1/20
DW43	MR-4R	6/2/20	Fecal Coliform	SM 9221B	=	2200		18	MPN/100ml		FGL Env.	6/2/20	6/5/20
DW39	MR-2D	8/27/19	Total Coliform	SM 9221B	=	22000		180	MPN/100ml		FGL Env.	8/27/19	8/31/19
DW39	MR-2D	8/27/19	Total Coliform	SM 9223B	>	2419.6		1	MPN/100ml		FGL Env.	8/27/19	8/28/19
SE71	MR-2D	11/26/19	Total Coliform	SM 9221B, C, E	=	1600000		1.8	MPN/100ml		GeoAnalytical	11/27/19	
SE71	MR-2D	11/26/19	Total Coliform	SM 9223B (Colilert)	>	2420		1	MPN/100ml		GeoAnalytical	11/27/19	
SE72	MR-2D	1/9/20	Total Coliform	SM 9221B	=	13000		180	MPN/100ml		FGL Env.	1/9/20	1/12/20
SE72	MR-2D	1/9/20	Total Coliform	SM 9223B	>	2419.6		1	MPN/100ml		FGL Env.	1/9/20	1/10/20
DW41	MR-2D	2/5/20	Total Coliform	SM 9221B	=	7900		180	MPN/100ml		FGL Env.	2/5/20	2/8/20
DW41	MR-2D	2/5/20	Total Coliform	SM 9223B	=	524.7		1	MPN/100ml		FGL Env.	2/5/20	2/6/20
SE73	MR-2D	3/15/20	Total Coliform	SM 9221B	=	230000		180	MPN/100ml		FGL Env.	3/15/20	3/18/20
SE73	MR-2D	3/15/20	Total Coliform	SM 9223B	>	24196		1	MPN/100ml		FGL Env.	3/15/20	3/16/20
DW42	MR-2D	4/27/20	Total Coliform	SM 9221B	=	4900		180	MPN/100ml		FGL Env.	4/27/20	4/30/20
DW42	MR-2D	4/27/20	Total Coliform	SM 9223B	=	9208		10	MPN/100ml		FGL Env.	4/27/20	4/28/20
DW43	MR-2D	6/2/20	Total Coliform	SM 9221B	=	630000		180	MPN/100ml		FGL Env.	6/2/20	6/4/20
DW43	MR-2D	6/2/20	Total Coliform	SM 9223B	>	24196		10	MPN/100ml		FGL Env.	6/2/20	6/3/20
DW39	MR-2R	8/27/19	Total Coliform	SM 9221B	=	3300		180	MPN/100ml		FGL Env.	8/27/19	8/30/19
DW39	MR-2R	8/27/19	Total Coliform	SM 9223B	>	2419.6		1	MPN/100ml		FGL Env.	8/27/19	8/28/19
SE72	MR-2R	1/9/20	Total Coliform	SM 9221B	=	130000		1800	MPN/100ml		FGL Env.	1/9/20	1/13/20
SE72	MR-2R	1/9/20	Total Coliform	SM 9223B	>	2419.6		1	MPN/100ml		FGL Env.	1/9/20	1/10/20
DW41	MR-2R	2/5/20	Total Coliform	SM 9221B	=	79000		1800	MPN/100ml		FGL Env.	2/5/20	2/8/20
DW41	MR-2R	2/5/20	Total Coliform	SM 9223B	=	2419.6		1	MPN/100ml		FGL Env.	2/5/20	2/6/20

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Event	Site Code	Date Sampled	Analyte	Analytical Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
SE73	MR-2R	3/15/20	Total Coliform	SM 9221B	=	2300000		1800	MPN/100ml		FGL Env.	3/15/20	3/17/20
SE73	MR-2R	3/15/20	Total Coliform	SM 9223B	>	24196		1	MPN/100ml		FGL Env.	3/15/20	3/16/20
DW42	MR-2R	4/27/20	Total Coliform	SM 9221B	=	11000		180	MPN/100ml		FGL Env.	4/27/20	4/30/20
DW42	MR-2R	4/27/20	Total Coliform	SM 9223B	>	24196		10	MPN/100ml		FGL Env.	4/27/20	4/28/20
DW43	MR-2R	6/2/20	Total Coliform	SM 9221B	=	33000		180	MPN/100ml		FGL Env.	6/2/20	6/5/20
DW43	MR-2R	6/2/20	Total Coliform	SM 9223B	>	24196		10	MPN/100ml		FGL Env.	6/2/20	6/3/20
DW39	Orange Sonora	8/27/19	Total Coliform	SM 9221B	=	79000		1800	MPN/100ml		FGL Env.	8/27/19	8/31/19
DW39	Orange Sonora	8/27/19	Total Coliform	SM 9223B	>	2419.6		1	MPN/100ml		FGL Env.	8/27/19	8/28/19
DW40	MM-142	9/26/19	Total Coliform	SM 9221B	=	130000		1800	MPN/100ml		FGL Env.	9/26/19	9/29/19
DW40	MM-142	9/26/19	Total Coliform	SM 9223B	>	24196		10	MPN/100ml		FGL Env.	9/26/19	9/27/19
SE71	MM-142	11/26/19	Total Coliform	SM 9221B, C, E	=	1600000		1.8	MPN/100ml		GeoAnalytical	11/27/19	
SE71	MM-142	11/26/19	Total Coliform	SM 9223B (Colilert)	>	2420		1	MPN/100ml		GeoAnalytical	11/27/19	
SE72	MM-142	1/9/20	Total Coliform	SM 9221B	=	230000		18000	MPN/100ml		FGL Env.	1/9/20	1/13/20
SE72	MM-142	1/9/20	Total Coliform	SM 9223B	>	2419.6		1	MPN/100ml		FGL Env.	1/9/20	1/10/20
DW41	MM-142	2/5/20	Total Coliform	SM 9221B	=	13000		180	MPN/100ml		FGL Env.	2/5/20	2/8/20
DW41	MM-142	2/5/20	Total Coliform	SM 9223B	=	1986.3		1	MPN/100ml		FGL Env.	2/5/20	2/6/20
SE73	MM-142	3/15/20	Total Coliform	SM 9221B	=	49000		18000	MPN/100ml		FGL Env.	3/15/20	3/18/20
SE73	MM-142	3/15/20	Total Coliform	SM 9223B	>	24196		1	MPN/100ml		FGL Env.	3/15/20	3/16/20
DW42	MM-142	4/27/20	Total Coliform	SM 9221B	=	3100		180	MPN/100ml		FGL Env.	4/27/20	4/30/20
DW42	MM-142	4/27/20	Total Coliform	SM 9223B	=	6131		10	MPN/100ml		FGL Env.	4/27/20	4/28/20
DW43	MM-142	6/2/20	Total Coliform	SM 9221B	=	23000		180	MPN/100ml		FGL Env.	6/2/20	6/4/20
DW43	MM-142	6/2/20	Total Coliform	SM 9223B	>	24196		10	MPN/100ml		FGL Env.	6/2/20	6/3/20
DW39	MR-4R	8/27/19	Total Coliform	SM 9221B	=	13000		180	MPN/100ml		FGL Env.	8/27/19	8/31/19
DW39	MR-4R	8/27/19	Total Coliform	SM 9223B	=	1203.3		1	MPN/100ml		FGL Env.	8/27/19	8/28/19
DW40	MR-4R	9/26/19	Total Coliform	SM 9221B	=	17000		180	MPN/100ml		FGL Env.	9/26/19	9/29/19
DW40	MR-4R	9/26/19	Total Coliform	SM 9223B	>	24196		10	MPN/100ml		FGL Env.	9/26/19	9/27/19
SE71	MR-4R	11/26/19	Total Coliform	SM 9221B, C, E	=	9200		1.8	MPN/100ml		GeoAnalytical	11/27/19	
SE71	MR-4R	11/26/19	Total Coliform	SM 9223B (Colilert)	>	2420		1	MPN/100ml		GeoAnalytical	11/27/19	
SE72	MR-4R	1/9/20	Total Coliform	SM 9221B	=	2300		180	MPN/100ml		FGL Env.	1/9/20	1/12/20
SE72	MR-4R	1/9/20	Total Coliform	SM 9223B	=	613.1		1	MPN/100ml		FGL Env.	1/9/20	1/10/20
DW41	MR-4R	2/5/20	Total Coliform	SM 9221B	=	13000		180	MPN/100ml		FGL Env.	2/5/20	2/8/20
DW41	MR-4R	2/5/20	Total Coliform	SM 9223B	=	123.9		1	MPN/100ml		FGL Env.	2/5/20	2/6/20
SE73	MR-4R	3/15/20	Total Coliform	SM 9221B	=	1300		180	MPN/100ml		FGL Env.	3/15/20	3/18/20
SE73	MR-4R	3/15/20	Total Coliform	SM 9223B	=	3654		1	MPN/100ml		FGL Env.	3/15/20	3/16/20
DW42	MR-4R	4/27/20	Total Coliform	SM 9221B	=	3100		180	MPN/100ml		FGL Env.	4/27/20	5/1/20
DW42	MR-4R	4/27/20	Total Coliform	SM 9223B	=	3784		10	MPN/100ml		FGL Env.	4/27/20	4/28/20
DW43	MR-4R	6/2/20	Total Coliform	SM 9221B	=	4900		180	MPN/100ml		FGL Env.	6/2/20	6/5/20
DW43	MR-4R	6/2/20	Total Coliform	SM 9223B	>	24196		10	MPN/100ml		FGL Env.	6/2/20	6/3/20
DW39	MR-2D	8/27/19	Dissolved Oxygen		=	4.46		0.01	mg/L		Field		

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SE71	MR-2D	11/26/19	Dissolved Oxygen		=	10.38		0.01	mg/L		Field		
SE72	MR-2D	1/9/20	Dissolved Oxygen		=	3.58		0.01	mg/L		Field		
DW41	MR-2D	2/5/20	Dissolved Oxygen		=	5.09		0.01	mg/L		Field		
SE73	MR-2D	3/15/20	Dissolved Oxygen		=	8.25		0.01	mg/L		Field		
DW42	MR-2D	4/27/20	Dissolved Oxygen		=	2.5		0.01	mg/L		Field		
DW43	MR-2D	6/2/20	Dissolved Oxygen		=	6.75		0.01	mg/L		Field		
DW39	MR-2R	8/27/19	Dissolved Oxygen		=	4.65		0.01	mg/L		Field		
SE72	MR-2R	1/9/20	Dissolved Oxygen		=	5.03		0.01	mg/L		Field		
DW41	MR-2R	2/5/20	Dissolved Oxygen		=	8.83		0.01	mg/L		Field		
SE73	MR-2R	3/15/20	Dissolved Oxygen		=	3.14		0.01	mg/L		Field		
DW42	MR-2R	4/27/20	Dissolved Oxygen		=	3.37		0.01	mg/L		Field		
DW43	MR-2R	6/2/20	Dissolved Oxygen		=	3.06		0.01	mg/L		Field		
DW39	Orange Sonora	8/27/19	Dissolved Oxygen		=	6.29		0.01	mg/L		Field		
DW40	MM-142	9/26/19	Dissolved Oxygen		=	4		0.01	mg/L		Field		
SE71	MM-142	11/26/19	Dissolved Oxygen		=	10.58		0.01	mg/L		Field		
SE72	MM-142	1/9/20	Dissolved Oxygen		=	8.79		0.01	mg/L		Field		
DW41	MM-142	2/5/20	Dissolved Oxygen		=	6.89		0.01	mg/L		Field		
SE73	MM-142	3/15/20	Dissolved Oxygen		=	8.75		0.01	mg/L		Field		
DW42	MM-142	4/27/20	Dissolved Oxygen		=	6.39		0.01	mg/L		Field		
DW43	MM-142	6/2/20	Dissolved Oxygen		=	7.32		0.01	mg/L		Field		
DW39	MR-4R	8/27/19	Dissolved Oxygen		=	10.82		0.01	mg/L		Field		
DW40	MR-4R	9/26/19	Dissolved Oxygen		=	7.47		0.01	mg/L		Field		
SE71	MR-4R	11/26/19	Dissolved Oxygen		=	9.33		0.01	mg/L		Field		
SE72	MR-4R	1/9/20	Dissolved Oxygen		=	8.68		0.01	mg/L		Field		
DW41	MR-4R	2/5/20	Dissolved Oxygen		=	10.45		0.01	mg/L		Field		
SE73	MR-4R	3/15/20	Dissolved Oxygen		=	8.41		0.01	mg/L		Field		
DW42	MR-4R	4/27/20	Dissolved Oxygen		=	5.77		0.01	mg/L		Field		
DW43	MR-4R	6/2/20	Dissolved Oxygen		=	7.38		0.01	mg/L		Field		
SE71	NE-RAIN	11/27/19	Dissolved Oxygen		=	11.44		0.01	mg/L		Field		
SE72	NE-RAIN	1/9/20	Dissolved Oxygen		=	9.58		0.01	mg/L		Field		
SE73	NE-RAIN	3/15/20	Dissolved Oxygen		=	9.21		0.01	mg/L		Field		
SE71	NW-RAIN	11/27/19	Dissolved Oxygen		=	11.25		0.01	mg/L		Field		
SE72	NW-RAIN	1/9/20	Dissolved Oxygen		=	10.56		0.01	mg/L		Field		
SE73	NW-RAIN	3/15/20	Dissolved Oxygen		=	7.71		0.01	mg/L		Field		
SE71	SC-RAIN	11/27/19	Dissolved Oxygen		=	11.14		0.01	mg/L		Field		
SE72	SC-RAIN	1/9/20	Dissolved Oxygen		=	9.34		0.01	mg/L		Field		
SE73	SC-RAIN	3/15/20	Dissolved Oxygen		=	8.35		0.01	mg/L		Field		
DW39	MR-2D	8/27/19	pH - field		=	6.62		0-14	pH Units		Field		
SE71	MR-2D	11/26/19	pH - field		=	7.71		0-14	pH Units		Field		

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Event	Site Code	Date Sampled	Analyte	Analytical Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
SE72	MR-2D	1/9/20	pH - field		=	7.03		0-14	pH Units		Field		
DW41	MR-2D	2/5/20	pH - field		=	7.52		0-14	pH Units		Field		
SE73	MR-2D	3/15/20	pH - field		=	7.44		0-14	pH Units		Field		
DW42	MR-2D	4/27/20	pH - field		=	6.51		0-14	pH Units		Field		
DW43	MR-2D	6/2/20	pH - field		=	6.39		0-14	pH Units		Field		
DW39	MR-2R	8/27/19	pH - field		=	7.32		0-14	pH Units		Field		
SE72	MR-2R	1/9/20	pH - field		=	7.11		0-14	pH Units		Field		
DW41	MR-2R	2/5/20	pH - field		=	7.55		0-14	pH Units		Field		
SE73	MR-2R	3/15/20	pH - field		=	7.01		0-14	pH Units		Field		
DW42	MR-2R	4/27/20	pH - field		=	7.21		0-14	pH Units		Field		
DW43	MR-2R	6/2/20	pH - field		=	7.14		0-14	pH Units		Field		
DW39	Orange Sonora	8/27/19	pH - field		=	7.87		0-14	pH Units		Field		
DW40	MM-142	9/26/19	pH - field		=	7.62		0-14	pH Units		Field		
SE71	MM-142	11/26/19	pH - field		=	7.83		0-14	pH Units		Field		
SE72	MM-142	1/9/20	pH - field		=	7.07		0-14	pH Units		Field		
DW41	MM-142	2/5/20	pH - field		=	7.92		0-14	pH Units		Field		
SE73	MM-142	3/15/20	pH - field		=	7.35		0-14	pH Units		Field		
DW42	MM-142	4/27/20	pH - field		=	7.75		0-14	pH Units		Field		
DW43	MM-142	6/2/20	pH - field		=	7.54		0-14	pH Units		Field		
DW39	MR-4R	8/27/19	pH - field		=	9.48		0-14	pH Units		Field		
DW40	MR-4R	9/26/19	pH - field		=	8.32		0-14	pH Units		Field		
SE71	MR-4R	11/26/19	pH - field		=	7.63		0-14	pH Units		Field		
SE72	MR-4R	1/9/20	pH - field		=	7.26		0-14	pH Units		Field		
DW41	MR-4R	2/5/20	pH - field		=	8.22		0-14	pH Units		Field		
SE73	MR-4R	3/15/20	pH - field		=	7.55		0-14	pH Units		Field		
DW42	MR-4R	4/27/20	pH - field		=	7.87		0-14	pH Units		Field		
DW43	MR-4R	6/2/20	pH - field		=	7.49		0-14	pH Units		Field		
SE71	NE-RAIN	11/27/19	pH - field		=	6.4		0-14	pH Units		Field		
SE72	NE-RAIN	1/9/20	pH - field		=	7.13		0-14	pH Units		Field		
SE73	NE-RAIN	3/15/20	pH - field		=	7.31		0-14	pH Units		Field		
SE71	NW-RAIN	11/27/19	pH - field		=	6.84		0-14	pH Units		Field		
SE72	NW-RAIN	1/9/20	pH - field		=	6.22		0-14	pH Units		Field		
SE73	NW-RAIN	3/15/20	pH - field		=	7.41		0-14	pH Units		Field		
SE71	SC-RAIN	11/27/19	pH - field		=	7.95		0-14	pH Units		Field		
SE72	SC-RAIN	1/9/20	pH - field		=	6.6		0-14	pH Units		Field		
SE73	SC-RAIN	3/15/20	pH - field		=	6.44		0-14	pH Units		Field		
DW39	MR-2D	8/27/19	Temperature - field		=	22.2		0.01	°C		Field		
SE71	MR-2D	11/26/19	Temperature - field		=	11		0.01	°C		Field		
SE72	MR-2D	1/9/20	Temperature - field		=	11		0.01	°C		Field		

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Event	Site Code	Date Sampled	Analyte	Analytical Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
DW41	MR-2D	2/5/20	Temperature - field		=	11.4		0.01	°C		Field		
SE73	MR-2D	3/15/20	Temperature - field		=	13.2		0.01	°C		Field		
DW42	MR-2D	4/27/20	Temperature - field		=	17.1		0.01	°C		Field		
DW43	MR-2D	6/2/20	Temperature - field		=	20.7		0.01	°C		Field		
DW39	MR-2R	8/27/19	Temperature - field		=	27.2		0.01	°C		Field		
SE72	MR-2R	1/9/20	Temperature - field		=	10.9		0.01	°C		Field		
DW41	MR-2R	2/5/20	Temperature - field		=	8.8		0.01	°C		Field		
SE73	MR-2R	3/15/20	Temperature - field		=	14		0.01	°C		Field		
DW42	MR-2R	4/27/20	Temperature - field		=	21.4		0.01	°C		Field		
DW43	MR-2R	6/2/20	Temperature - field		=	24.5		0.01	°C		Field		
DW39	Orange Sonora	8/27/19	Temperature - field		=	25.3		0.01	°C		Field		
DW40	MM-142	9/26/19	Temperature - field		=	24.4		0.01	°C		Field		
SE71	MM-142	11/26/19	Temperature - field		=	11		0.01	°C		Field		
SE72	MM-142	1/9/20	Temperature - field		=	11.8		0.01	°C		Field		
DW41	MM-142	2/5/20	Temperature - field		=	13.1		0.01	°C		Field		
SE73	MM-142	3/15/20	Temperature - field		=	13.3		0.01	°C		Field		
DW42	MM-142	4/27/20	Temperature - field		=	19.4		0.01	°C		Field		
DW43	MM-142	6/2/20	Temperature - field		=	22.6		0.01	°C		Field		
DW39	MR-4R	8/27/19	Temperature - field		=	26.5		0.01	°C		Field		
DW40	MR-4R	9/26/19	Temperature - field		=	22.8		0.01	°C		Field		
SE71	MR-4R	11/26/19	Temperature - field		=	10.8		0.01	°C		Field		
SE72	MR-4R	1/9/20	Temperature - field		=	9.6		0.01	°C		Field		
DW41	MR-4R	2/5/20	Temperature - field		=	10.5		0.01	°C		Field		
SE73	MR-4R	3/15/20	Temperature - field		=	14.6		0.01	°C		Field		
DW42	MR-4R	4/27/20	Temperature - field		=	21.9		0.01	°C		Field		
DW43	MR-4R	6/2/20	Temperature - field		=	25.1		0.01	°C		Field		
SE71	NE-RAIN	11/27/19	Temperature - field		=	11.1		0.01	°C		Field		
SE72	NE-RAIN	1/9/20	Temperature - field		=	11.7		0.01	°C		Field		
SE73	NE-RAIN	3/15/20	Temperature - field		=	15.5		0.01	°C		Field		
SE71	NW-RAIN	11/27/19	Temperature - field		=	8.4		0.01	°C		Field		
SE72	NW-RAIN	1/9/20	Temperature - field		=	12.2		0.01	°C		Field		
SE73	NW-RAIN	3/15/20	Temperature - field		=	17.7		0.01	°C		Field		
SE71	SC-RAIN	11/27/19	Temperature - field		=	7.7		0.01	°C		Field		
SE72	SC-RAIN	1/9/20	Temperature - field		=	12.6		0.01	°C		Field		
SE73	SC-RAIN	3/15/20	Temperature - field		=	16.4		0.01	°C		Field		
DW39	MR-2D	8/27/19	BOD	5210B	=	25	0.19	17	mg/L	I	FGL Env.	8/28/19	9/2/19
SE71	MR-2D	11/26/19	BOD	5210B-2001	=	86	0.19	2	mg/L		GeoAnalytical	11/27/19	
SE72	MR-2D	1/9/20	BOD	5210B	=	21	0.19	8.7	mg/L		FGL Env.	1/9/20	1/14/20
DW41	MR-2D	2/5/20	BOD	5210B	=	5.59	0.19	1.5	mg/L	I	FGL Env.	2/5/20	2/12/20

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SE73	MR-2D	3/15/20	BOD	5210B	=	16.3	0.19	8.7	mg/L		FGL Env.	3/16/20	3/21/20
DW42	MR-2D	4/27/20	BOD	5210B	=	6.9	0.19	2	mg/L		FGL Env.	4/28/20	5/3/20
DW43	MR-2D	6/2/20	BOD	5210B	=	43.4	0.19	17	mg/L		FGL Env.	6/2/20	6/7/20
DW39	MR-2R	8/27/19	BOD	5210B	=	15.1	0.19	4.3	mg/L	I	FGL Env.	8/28/19	9/2/19
SE72	MR-2R	1/9/20	BOD	5210B	=	8.3	0.19	4.3	mg/L		FGL Env.	1/9/20	1/14/20
DW41	MR-2R	2/5/20	BOD	5210B	=	3.86	0.19	1.5	mg/L	I	FGL Env.	2/5/20	2/12/20
SE73	MR-2R	3/15/20	BOD	5210B	=	12.7	0.19	4.3	mg/L		FGL Env.	3/16/20	3/21/20
DW42	MR-2R	4/27/20	BOD	5210B	=	2.5	0.19	2	mg/L		FGL Env.	4/28/20	5/3/20
DW43	MR-2R	6/2/20	BOD	5210B	=	3.9	0.19	2	mg/L		FGL Env.	6/2/20	6/7/20
DW39	Orange Sonora	8/27/19	BOD	5210B	=	3.3	0.19	2	mg/L	I	FGL Env.	8/28/19	9/2/19
DW40	MM-142	9/26/19	BOD	5210B	=	1.2	0.19	2	mg/L	J	FGL Env.	9/27/19	10/2/19
SE71	MM-142	11/26/19	BOD	5210B-2001	=	48	0.19	2	mg/L		GeoAnalytical	11/27/19	
SE72	MM-142	1/9/20	BOD	5210B	=	33.7	0.19	17	mg/L		FGL Env.	1/9/20	1/14/20
DW41	MM-142	2/5/20	BOD	5210B	=	1.93	0.19	1.5	mg/L	I	FGL Env.	2/5/20	2/12/20
SE73	MM-142	3/15/20	BOD	5210B	=	8.97	4.3	17	mg/L		FGL Env.	3/16/20	3/21/20
DW42	MM-142	4/27/20	BOD	5210B	=	0.5	0.19	2	mg/L	J	FGL Env.	4/28/20	5/3/20
DW43	MM-142	6/2/20	BOD	5210B	=	0.4	0.19	2	mg/L	J	FGL Env.	6/2/20	6/7/20
DW39	MR-4R	8/27/19	BOD	5210B	=	8.97	0.19	4.3	mg/L	I	FGL Env.	8/28/19	9/2/19
DW40	MR-4R	9/26/19	BOD	5210B	=	7.11	0.19	4.3	mg/L		FGL Env.	9/27/19	10/2/19
SE71	MR-4R	11/26/19	BOD	5210B-2001	=	2	0.19	2	mg/L		GeoAnalytical	11/27/19	
SE72	MR-4R	1/9/20	BOD	5210B	=	1.5	0.19	2	mg/L	J	FGL Env.	1/9/20	1/14/20
DW41	MR-4R	2/5/20	BOD	5210B	=	0.25	0.19	1.5	mg/L	JI	FGL Env.	2/5/20	2/12/20
SE73	MR-4R	3/15/20	BOD	5210B	=	1.7	0.19	2	mg/L	J	FGL Env.	3/16/20	3/21/20
DW42	MR-4R	4/27/20	BOD	5210B	=	1.3	0.19	2	mg/L	J	FGL Env.	4/28/20	5/3/20
DW43	MR-4R	6/2/20	BOD	5210B	=	1.3	0.19	2	mg/L	J	FGL Env.	6/2/20	6/7/20
DW39	MR-2D	8/27/19	Specific Conductance (EC)		=	352.8		1	µS/cm		Field		
SE71	MR-2D	11/26/19	Specific Conductance (EC)		=	240.2		1	µS/cm		Field		
SE72	MR-2D	1/9/20	Specific Conductance (EC)		=	141		1	µS/cm		Field		
DW41	MR-2D	2/5/20	Specific Conductance (EC)		=	168.5		1	µS/cm		Field		
SE73	MR-2D	3/15/20	Specific Conductance (EC)		=	87.2		1	µS/cm		Field		
DW42	MR-2D	4/27/20	Specific Conductance (EC)		=	1348		1	µS/cm		Field		
DW43	MR-2D	6/2/20	Specific Conductance (EC)		=	232		1	µS/cm		Field		
DW39	MR-2R	8/27/19	Specific Conductance (EC)		=	347		1	µS/cm		Field		
SE72	MR-2R	1/9/20	Specific Conductance (EC)		=	203.2		1	µS/cm		Field		
DW41	MR-2R	2/5/20	Specific Conductance (EC)		=	566.7		1	µS/cm		Field		
SE73	MR-2R	3/15/20	Specific Conductance (EC)		=	204.2		1	µS/cm		Field		
DW42	MR-2R	4/27/20	Specific Conductance (EC)		=	620		1	µS/cm		Field		
DW43	MR-2R	6/2/20	Specific Conductance (EC)		=	583		1	µS/cm		Field		
DW39	Orange Sonora	8/27/19	Specific Conductance (EC)		=	0.7345		1	µS/cm		Field		



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DW40	MM-142	9/26/19	Specific Conductance (EC)		=	1659		1	µS/cm		Field		
SE71	MM-142	11/26/19	Specific Conductance (EC)		=	150.2		1	µS/cm		Field		
SE72	MM-142	1/9/20	Specific Conductance (EC)		=	436.3		1	µS/cm		Field		
DW41	MM-142	2/5/20	Specific Conductance (EC)		=	1842		1	µS/cm		Field		
SE73	MM-142	3/15/20	Specific Conductance (EC)		=	222.5		1	µS/cm		Field		
DW42	MM-142	4/27/20	Specific Conductance (EC)		=	1874		1	µS/cm		Field		
DW43	MM-142	6/2/20	Specific Conductance (EC)		=	204.6		1	µS/cm		Field		
DW39	MR-4R	8/27/19	Specific Conductance (EC)		=	311		1	µS/cm		Field		
DW40	MR-4R	9/26/19	Specific Conductance (EC)		=	299.4		1	µS/cm		Field		
SE71	MR-4R	11/26/19	Specific Conductance (EC)		=	549.8		1	µS/cm		Field		
SE72	MR-4R	1/9/20	Specific Conductance (EC)		=	593.5		1	µS/cm		Field		
DW41	MR-4R	2/5/20	Specific Conductance (EC)		=	670.1		1	µS/cm		Field		
SE73	MR-4R	3/15/20	Specific Conductance (EC)		=	480.7		1	µS/cm		Field		
DW42	MR-4R	4/27/20	Specific Conductance (EC)		=	559		1	µS/cm		Field		
DW43	MR-4R	6/2/20	Specific Conductance (EC)		=	485.3		1	µS/cm		Field		
SE71	NE-RAIN	11/27/19	Specific Conductance (EC)		=	23		1	µS/cm		Field		
SE72	NE-RAIN	1/9/20	Specific Conductance (EC)		=	52		1	µS/cm		Field		
SE73	NE-RAIN	3/15/20	Specific Conductance (EC)		=	11.6		1	µS/cm		Field		
SE71	NW-RAIN	11/27/19	Specific Conductance (EC)		=	24.7		1	µS/cm		Field		
SE72	NW-RAIN	1/9/20	Specific Conductance (EC)		=	71.2		1	µS/cm		Field		
SE73	NW-RAIN	3/15/20	Specific Conductance (EC)		=	7.71		1	µS/cm		Field		
SE71	SC-RAIN	11/27/19	Specific Conductance (EC)		=	59.4		1	µS/cm		Field		
SE72	SC-RAIN	1/9/20	Specific Conductance (EC)		=	9		1	µS/cm		Field		
SE73	SC-RAIN	3/15/20	Specific Conductance (EC)		=	7.3		1	µS/cm		Field		
SE71	NE-RAIN	11/27/19	Mercury, total	EPA 1631E	=	7.2		0.5	ng/L		Weck Labs	11/27/19	1/2/20
SE72	NE-RAIN	1/9/20	Mercury, total	EPA 1631E	=	1.2	0.2	0.5	ng/L		Caltest	1/27/20	1/28/20
SE73	NE-RAIN	3/15/20	Mercury, total	EPA 1631E	=	2.1	0.2	0.5	ng/L		Caltest	4/6/20	4/7/20
SE71	NW-RAIN	11/27/19	Mercury, total	EPA 1631E	=	5.1		0.5	ng/L		Weck Labs	11/27/19	1/2/20
SE72	NW-RAIN	1/9/20	Mercury, total	EPA 1631E	=	1.1	0.2	0.5	ng/L		Caltest	1/22/20	1/23/20
SE73	NW-RAIN	3/15/20	Mercury, total	EPA 1631E	=	1.6	0.2	0.5	ng/L		Caltest	4/6/20	4/7/20
SE71	SC-RAIN	11/27/19	Mercury, total	EPA 1631E	=	5.6		0.5	ng/L		Weck Labs	11/27/19	1/2/20
SE72	SC-RAIN	1/9/20	Mercury, total	EPA 1631E	=	1.3	0.2	0.5	ng/L		Caltest	1/27/20	1/28/20
SE73	SC-RAIN	3/15/20	Mercury, total	EPA 1631E	=	1.8	0.2	0.5	ng/L		Caltest	4/6/20	4/7/20
SE71	NE-RAIN	11/27/19	Methyl Mercury	EPA 1630	=	0.08	0.02	0.05	ng/L		Caltest	12/12/19	12/13/19
SE72	NE-RAIN	1/9/20	Methyl Mercury	EPA 1630	=	0.05	0.02	0.05	ng/L		Caltest	1/17/20	1/17/20
SE73	NE-RAIN	3/15/20	Methyl Mercury	EPA 1630	=	0.13	0.02	0.05	ng/L		Caltest	3/25/20	3/25/20
SE71	NW-RAIN	11/27/19	Methyl Mercury	EPA 1630	=	0.03	0.02	0.05	ng/L	J	Caltest	12/12/19	12/13/19
SE72	NW-RAIN	1/9/20	Methyl Mercury	EPA 1630	=	0.05	0.02	0.05	ng/L		Caltest	1/17/20	1/17/20
SE73	NW-RAIN	3/15/20	Methyl Mercury	EPA 1630	=	0.08	0.02	0.05	ng/L		Caltest	3/25/20	3/25/20

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SE71	SC-RAIN	11/27/19	Methyl Mercury	EPA 1630	=	0.13	0.02	0.05	ng/L		Caltest	12/12/19	12/13/19
SE72	SC-RAIN	1/9/20	Methyl Mercury	EPA 1630	=	0.06	0.02	0.05	ng/L		Caltest	1/17/20	1/17/20
SE73	SC-RAIN	3/15/20	Methyl Mercury	EPA 1630	=	0.14	0.02	0.05	ng/L		Caltest	3/25/20	3/25/20
SE71	NE-RAIN	11/27/19	Chlorpyrifos	EPA 8270M_NCI	<	0.6	0.6	1.3	ng/L	ND	Caltest	11/29/19	12/14/19
SE72	NE-RAIN	1/9/20	Chlorpyrifos	EPA 8270M_NCI	=	0.5	0.5	1	ng/L	J	Caltest	1/10/20	1/22/20
SE73	NE-RAIN	3/15/20	Chlorpyrifos	EPA 8270M_NCI	=	3.2	0.5	1	ng/L		Caltest	3/17/20	3/17/20
SE71	NW-RAIN	11/27/19	Chlorpyrifos	EPA 8270M_NCI	<	0.5	0.5	1	ng/L	ND	Caltest	11/29/19	12/14/19
SE72	NW-RAIN	1/9/20	Chlorpyrifos	EPA 8270M_NCI	=	0.9	0.6	1.1	ng/L	J	Caltest	1/10/20	1/22/20
SE73	NW-RAIN	3/15/20	Chlorpyrifos	EPA 8270M_NCI	=	6.4	0.5	1	ng/L		Caltest	3/17/20	3/28/20
SE71	SC-RAIN	11/27/19	Chlorpyrifos	EPA 8270M_NCI	<	0.5	0.5	1	ng/L	ND	Caltest	11/29/19	12/14/19
SE72	SC-RAIN	1/9/20	Chlorpyrifos	EPA 8270M_NCI	=	1.8	0.5	1	ng/L		Caltest	1/10/20	1/22/20
SE73	SC-RAIN	3/15/20	Chlorpyrifos	EPA 8270M_NCI	<	1	0.5	1	ng/L	ND	Caltest	3/17/20	3/28/20
SE71	NE-RAIN	11/27/19	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.6	ng/L	ND	Caltest	11/29/19	12/14/19
SE72	NE-RAIN	1/9/20	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	1/10/20	1/22/20
SE73	NE-RAIN	3/15/20	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	3/17/20	3/17/20
SE71	NW-RAIN	11/27/19	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	11/29/19	12/14/19
SE72	NW-RAIN	1/9/20	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.6	ng/L	ND	Caltest	1/10/20	1/22/20
SE73	NW-RAIN	3/15/20	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	3/17/20	3/28/20
SE71	SC-RAIN	11/27/19	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	11/29/19	12/14/19
SE72	SC-RAIN	1/9/20	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	1/10/20	1/22/20
SE73	SC-RAIN	3/15/20	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	3/17/20	3/28/20
SE71	NE-RAIN	11/27/19	Bifenthrin	EPA 8270M_NCI	=	4.3	0.1	0.6	ng/L		Caltest	11/29/19	12/14/19
SE72	NE-RAIN	1/9/20	Bifenthrin	EPA 8270M_NCI	=	0.8	0.1	0.5	ng/L		Caltest	1/10/20	1/22/20
SE73	NE-RAIN	3/15/20	Bifenthrin	EPA 8270M_NCI	=	0.5	0.1	0.5	ng/L		Caltest	3/17/20	3/17/20
SE71	NW-RAIN	11/27/19	Bifenthrin	EPA 8270M_NCI	=	1	0.1	0.5	ng/L		Caltest	11/29/19	12/14/19
SE72	NW-RAIN	1/9/20	Bifenthrin	EPA 8270M_NCI	=	0.5	0.1	0.6	ng/L	J	Caltest	1/10/20	1/22/20
SE73	NW-RAIN	3/15/20	Bifenthrin	EPA 8270M_NCI	=	0.2	0.1	0.5	ng/L	J	Caltest	3/17/20	3/28/20
SE71	SC-RAIN	11/27/19	Bifenthrin	EPA 8270M_NCI	=	1.5	0.1	0.5	ng/L		Caltest	11/29/19	12/14/19
SE72	SC-RAIN	1/9/20	Bifenthrin	EPA 8270M_NCI	=	1.5	0.1	0.5	ng/L		Caltest	1/10/20	1/22/20
SE73	SC-RAIN	3/15/20	Bifenthrin	EPA 8270M_NCI	=	0.3	0.1	0.5	ng/L	J	Caltest	3/17/20	3/28/20
SE71	NE-RAIN	11/27/19	Cyfluthrin	EPA 8270M_NCI	<	0.3	0.3	0.6	ng/L	ND	Caltest	11/29/19	12/14/19
SE72	NE-RAIN	1/9/20	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/10/20	1/22/20
SE73	NE-RAIN	3/15/20	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/17/20	3/17/20
SE71	NW-RAIN	11/27/19	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	11/29/19	12/14/19
SE72	NW-RAIN	1/9/20	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.6	ng/L	ND	Caltest	1/10/20	1/22/20
SE73	NW-RAIN	3/15/20	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/17/20	3/28/20
SE71	SC-RAIN	11/27/19	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	11/29/19	12/14/19
SE72	SC-RAIN	1/9/20	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/10/20	1/22/20
SE73	SC-RAIN	3/15/20	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/17/20	3/28/20



**City of Stockton and County of San Joaquin  
Ambient Monitoring Program 2019-2020 Data**

Event	Site Code	Date Sampled	Analyte	Analytical Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
SE71	NE-RAIN	11/27/19	Cypermethrin	EPA 8270M_NCI	=	3	0.3	0.6	ng/L		Caltest	11/29/19	12/14/19
SE72	NE-RAIN	1/9/20	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/10/20	1/22/20
SE73	NE-RAIN	3/15/20	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/17/20	3/17/20
SE71	NW-RAIN	11/27/19	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	11/29/19	12/14/19
SE72	NW-RAIN	1/9/20	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.6	ng/L	ND	Caltest	1/10/20	1/22/20
SE73	NW-RAIN	3/15/20	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/17/20	3/28/20
SE71	SC-RAIN	11/27/19	Cypermethrin	EPA 8270M_NCI	=	0.3	0.2	0.5	ng/L	J	Caltest	11/29/19	12/14/19
SE72	SC-RAIN	1/9/20	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/10/20	1/22/20
SE73	SC-RAIN	3/15/20	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/17/20	3/28/20
SE71	NE-RAIN	11/27/19	Deltamethrin/Tralomethrin	EPA 8270M_NCI	<	0.3	0.3	1.3	ng/L	ND	Caltest	11/29/19	12/14/19
SE72	NE-RAIN	1/9/20	Deltamethrin/Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	1/10/20	1/22/20
SE73	NE-RAIN	3/15/20	Deltamethrin/Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	3/17/20	3/17/20
SE71	NW-RAIN	11/27/19	Deltamethrin/Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	11/29/19	12/14/19
SE72	NW-RAIN	1/9/20	Deltamethrin/Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1.1	ng/L	ND	Caltest	1/10/20	1/22/20
SE73	NW-RAIN	3/15/20	Deltamethrin/Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	3/17/20	3/28/20
SE71	SC-RAIN	11/27/19	Deltamethrin/Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	11/29/19	12/14/19
SE72	SC-RAIN	1/9/20	Deltamethrin/Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	1/10/20	1/22/20
SE73	SC-RAIN	3/15/20	Deltamethrin/Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	3/17/20	3/28/20
SE71	NE-RAIN	11/27/19	Esfenvalerate/Fenvalerate	EPA 8270M_NCI	=	0.5	0.3	1.3	ng/L	J	Caltest	11/29/19	12/14/19
SE72	NE-RAIN	1/9/20	Esfenvalerate/Fenvalerate	EPA 8270M_NCI	=	3.5	0.2	1	ng/L		Caltest	1/10/20	1/22/20
SE73	NE-RAIN	3/15/20	Esfenvalerate/Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	3/17/20	3/17/20
SE71	NW-RAIN	11/27/19	Esfenvalerate/Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	11/29/19	12/14/19
SE72	NW-RAIN	1/9/20	Esfenvalerate/Fenvalerate	EPA 8270M_NCI	=	1.8	0.2	1.1	ng/L		Caltest	1/10/20	1/22/20
SE73	NW-RAIN	3/15/20	Esfenvalerate/Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	3/17/20	3/28/20
SE71	SC-RAIN	11/27/19	Esfenvalerate/Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	11/29/19	12/14/19
SE72	SC-RAIN	1/9/20	Esfenvalerate/Fenvalerate	EPA 8270M_NCI	=	3.4	0.2	1	ng/L		Caltest	1/10/20	1/22/20
SE73	SC-RAIN	3/15/20	Esfenvalerate/Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	3/17/20	3/28/20
SE71	NE-RAIN	11/27/19	Fenpropathrin	EPA 8270M_NCI	=	3.1	0.3	0.6	ng/L		Caltest	11/29/19	12/14/19
SE72	NE-RAIN	1/9/20	Fenpropathrin	EPA 8270M_NCI	=	0.3	0.2	0.5	ng/L	J	Caltest	1/10/20	1/22/20
SE73	NE-RAIN	3/15/20	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/17/20	3/17/20
SE71	NW-RAIN	11/27/19	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	11/29/19	12/14/19
SE72	NW-RAIN	1/9/20	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.6	ng/L	ND	Caltest	1/10/20	1/22/20
SE73	NW-RAIN	3/15/20	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/17/20	3/28/20
SE71	SC-RAIN	11/27/19	Fenpropathrin	EPA 8270M_NCI	=	0.3	0.2	0.5	ng/L	J	Caltest	11/29/19	12/14/19
SE72	SC-RAIN	1/9/20	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/10/20	1/22/20
SE73	SC-RAIN	3/15/20	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/17/20	3/28/20
SE71	NE-RAIN	11/27/19	Lambda-Cyhalothrin	EPA 8270M_NCI	=	1.1	0.3	0.6	ng/L		Caltest	11/29/19	12/14/19
SE72	NE-RAIN	1/9/20	Lambda-Cyhalothrin	EPA 8270M_NCI	=	0.4	0.2	0.5	ng/L	J	Caltest	1/10/20	1/22/20
SE73	NE-RAIN	3/15/20	Lambda-Cyhalothrin	EPA 8270M_NCI	=	0.7	0.2	0.5	ng/L		Caltest	3/17/20	3/17/20

**City of Stockton and County of San Joaquin  
Ambient Monitoring Program 2019-2020 Data**

Event	Site Code	Date Sampled	Analyte	Analytical Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
SE71	NW-RAIN	11/27/19	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	11/29/19	12/14/19
SE72	NW-RAIN	1/9/20	Lambda-Cyhalothrin	EPA 8270M_NCI	=	0.3	0.2	0.6	ng/L	J	Caltest	1/10/20	1/22/20
SE73	NW-RAIN	3/15/20	Lambda-Cyhalothrin	EPA 8270M_NCI	=	0.5	0.2	0.5	ng/L		Caltest	3/17/20	3/28/20
SE71	SC-RAIN	11/27/19	Lambda-Cyhalothrin	EPA 8270M_NCI	=	0.3	0.2	0.5	ng/L	J	Caltest	11/29/19	12/14/19
SE72	SC-RAIN	1/9/20	Lambda-Cyhalothrin	EPA 8270M_NCI	=	0.6	0.2	0.5	ng/L		Caltest	1/10/20	1/22/20
SE73	SC-RAIN	3/15/20	Lambda-Cyhalothrin	EPA 8270M_NCI	=	0.6	0.2	0.5	ng/L		Caltest	3/17/20	3/28/20
SE71	NE-RAIN	11/27/19	Permethrin	EPA 8270M_NCI	=	2.9	3	13	ng/L	J	Caltest	11/29/19	12/14/19
SE72	NE-RAIN	1/9/20	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	1/10/20	1/22/20
SE73	NE-RAIN	3/15/20	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	3/17/20	3/17/20
SE71	NW-RAIN	11/27/19	Permethrin	EPA 8270M_NCI	=	2.2	2	10	ng/L	J	Caltest	11/29/19	12/14/19
SE72	NW-RAIN	1/9/20	Permethrin	EPA 8270M_NCI	<	2	2	11	ng/L	ND	Caltest	1/10/20	1/22/20
SE73	NW-RAIN	3/15/20	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	3/17/20	3/28/20
SE71	SC-RAIN	11/27/19	Permethrin	EPA 8270M_NCI	=	2.4	2	10	ng/L	J	Caltest	11/29/19	12/14/19
SE72	SC-RAIN	1/9/20	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	1/10/20	1/22/20
SE73	SC-RAIN	3/15/20	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	3/17/20	3/28/20
SE71	NE-RAIN	11/27/19	tau-Fluvalinate	EPA 8270M_NCI	<	0.3	0.3	0.6	ng/L	ND	Caltest	11/29/19	12/14/19
SE72	NE-RAIN	1/9/20	tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/10/20	1/22/20
SE73	NE-RAIN	3/15/20	tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/17/20	3/17/20
SE71	NW-RAIN	11/27/19	tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	11/29/19	12/14/19
SE72	NW-RAIN	1/9/20	tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.6	ng/L	ND	Caltest	1/10/20	1/22/20
SE73	NW-RAIN	3/15/20	tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/17/20	3/28/20
SE71	SC-RAIN	11/27/19	tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	11/29/19	12/14/19
SE72	SC-RAIN	1/9/20	tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/10/20	1/22/20
SE73	SC-RAIN	3/15/20	tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/17/20	3/28/20
SE71	NE-RAIN	11/27/19	Tetramethrin	EPA 8270M_NCI	=	24	0.3	0.6	ng/L		Caltest	11/29/19	12/14/19
SE72	NE-RAIN	1/9/20	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/10/20	1/22/20
SE73	NE-RAIN	3/15/20	Tetramethrin	EPA 8270M_NCI	=	51	0.2	0.5	ng/L		Caltest	3/17/20	3/17/20
SE71	NW-RAIN	11/27/19	Tetramethrin	EPA 8270M_NCI	=	0.2	0.2	0.5	ng/L		Caltest	11/29/19	12/14/19
SE72	NW-RAIN	1/9/20	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.6	ng/L	ND	Caltest	1/10/20	1/22/20
SE73	NW-RAIN	3/15/20	Tetramethrin	EPA 8270M_NCI	=	6.4	0.2	0.5	ng/L		Caltest	3/17/20	3/28/20
SE71	SC-RAIN	11/27/19	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	11/29/19	12/14/19
SE72	SC-RAIN	1/9/20	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/10/20	1/22/20
SE73	SC-RAIN	3/15/20	Tetramethrin	EPA 8270M_NCI	=	5.7	0.2	0.5	ng/L		Caltest	3/17/20	3/28/20

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# **Appendix C**

## **2019-2020 Data Summary Tables**

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## MORMON SLOUGH 2019-2020 DATA FOR POLLUTANTS OF CONCERN

### Urban Discharge and Receiving Water Data

Event	Date	MR-2D	MR-2R	Orange Sonora <sup>[a]</sup>	MM-142 <sup>[a]</sup>	MR-4R	WQO
<b>Fecal Indicator Bacteria</b>							
<b><i>E. Coli</i> (MPN/100mL)</b>							
DW39 <sup>[a]</sup>	8/27/2019	<1	33	84 <sup>[b]</sup>	-	45 <sup>[b]</sup>	235
DW40 <sup>[a]</sup>	9/26/2019	-	-	-	1,259	884	235
SE71	11/26/2019	2,420	<sup>[c]</sup>	-	1,000	1,700	235
SE72	1/9/2020	25	144	-	124	20	235
DW41	2/5/2020	3	167	-	3	22	235
SE73	3/15/2020	14,136	8,164	-	24,196	158	235
DW42	4/27/2020	31	609	-	295	52	235
DW43	6/2/2020	24,196	19,863	-	820	2,613	235
<b>Fecal Coliform (MPN/100mL)</b>							
DW39 <sup>[a]</sup>	8/27/2019	40	2,300	7,900 <sup>[b]</sup>	-	4,900 <sup>[b]</sup>	400
DW40 <sup>[a]</sup>	9/26/2019	-	-	-	260	2,200	400
SE71	11/26/2019	350,000	<sup>[c]</sup>	-	280,000	9,200	400
SE72	1/9/2020	490	3,300	-	13,000	790	400
DW41	2/5/2020	110	3,300	-	40	4,900	400
SE73	3/15/2020	21,000	63,000	-	33,000	790	400
DW42	4/27/2020	130	700	-	1,300	68	400
DW43	6/2/2020	330,000	23,000	-	3,300	2,200	400
<b>Dissolved Oxygen (mg/L)</b>							
DW39 <sup>[a]</sup>	8/27/2019	4	5	6 <sup>[b]</sup>	-	11 <sup>[b]</sup>	>5
DW40 <sup>[a]</sup>	9/26/2019	-	-	-	4	7	>6
SE71	11/26/2019	10	<sup>[c]</sup>	-	11	9	>6
SE72	1/9/2020	4	5	-	9	9	>5
DW41	2/5/2020	5	9	-	7	10	>5
SE73	3/15/2020	8	3	-	9	8	>5
DW42	4/27/2020	3	3	-	6	6	>5
DW43	6/2/2020	7	3	-	7	7	>5

[a] The stations MR-2D and Orange Sonora were sampled during event DW39, however Orange Sonora was deemed unsuitable and replaced by station MM-142, which was sampled during DW40. The events DW39 and DW40 are considered one dry weather event.

[b] The results for Orange Sonora and MR-4R collected during DW39 were not used in the data analysis.

[c] This location was considered unsafe for sampling at the time of the event.

## Rainwater/Atmospheric Deposition Monitoring Data

	NE-RAIN	NW-RAIN	SC-RAIN
<b>Dissolved Oxygen (mg/L)</b>			
SE71	11.44	11.25	11.14
SE72	9.58	10.56	9.34
SE73	9.21	7.71	8.35
<b>Mercury</b>			
<b>Methyl Mercury, Total (ng/L)</b>			
SE71	0.08	0.03	0.13
SE72	0.05	0.05	0.06
SE73	0.13	0.08	0.14
<b>Mercury, total (ng/L)</b>			
SE71	7.2	5.1	5.6
SE72	1.2	1.1	1.3
SE73	2.1	1.6	1.8
<b>Chlorpyrifos (ng/L)</b>			
SE71	<0.6	<0.5	<0.5
SE72	0.5	0.9	1.8
SE73	3.2	6.4	<1
<b>Pyrethroids (ng/L)</b>			
<b>Allethrin (ng/L)</b>			
SE71	<0.1	<0.1	<0.1
SE72	<0.1	<0.1	<0.1
SE73	<0.1	<0.1	<0.1
<b>Bifenthrin (ng/L)</b>			
SE71	4.3	1	1.5
SE72	0.8	0.5	1.5
SE73	0.5	0.2	0.3
<b>Cyfluthrin (ng/L)</b>			
SE71	<0.3	<0.2	<0.2
SE72	<0.2	<0.2	<0.2
SE73	<0.2	<0.2	<0.2
<b>Cypermethrin (ng/L)</b>			
SE71	3	<0.2	0.3
SE72	<0.2	<0.2	<0.2
SE73	<0.2	<0.2	<0.2
<b>Deltamethrin/Tralomethrin (ng/L)</b>			
SE71	<0.3	<0.2	<0.2

	NE-RAIN	NW-RAIN	SC-RAIN
SE72	<0.2	<0.2	<0.2
SE73	<0.2	<0.2	<0.2
<b>Esfenvalerate/Fenvalerate (ng/L)</b>			
SE71	0.5	<0.2	<0.2
SE72	3.5	1.8	3.4
SE73	<0.2	<0.2	<0.2
<b>Fenpropathrin (ng/L)</b>			
SE71	3.1	<0.2	0.3
SE72	0.3	<0.2	<0.2
SE73	<0.2	<0.2	<0.2
<b>Lambda-Cyhalothrin (ng/L)</b>			
SE71	1.1	<0.2	0.3
SE72	0.4	0.3	0.6
SE73	0.7	0.5	0.6
<b>Permethrin (ng/L)</b>			
SE71	2.9	2.2	2.4
SE72	<2	<2	<2
SE73	<2	<2	<2
<b>tau-Fluvalinate (ng/L)</b>			
SE71	<0.3	<0.2	<0.2
SE72	<0.2	<0.2	<0.2
SE73	<0.2	<0.2	<0.2
<b>Tetramethrin (ng/L)</b>			
SE71	24	0.2	<0.2
SE72	<0.2	<0.2	<0.2
SE73	51	6.4	5.7



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# **Appendix D**

## **Delta Regional Monitoring Program Participation Letter**

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**Central Valley Regional Water Quality Control Board**

4 November 2015

Michael Snelling, Deputy Director  
San Joaquin County  
Department of Public Works  
1810 E. Hazelton Avenue  
Stockton, CA 95201

C. Mel Lytle, Ph. D., Director  
City of Stockton  
Department of Municipal Utilities  
425 N. El Dorado Street  
Stockton, CA 95202

***APPROVAL TO ALLOW THE CITY OF STOCKTON AND COUNTY OF SAN JOAQUIN  
TO REDUCE LOCAL WATER QUALITY MONITORING AND PARTICIPATE IN THE DELTA  
REGIONAL MONITORING PROGRAM***

Thank you for submitting your 10 June 2015 letter to the Central Valley Regional Water Quality Control Board (Central Valley Water Board) proposing 1) an alternative monitoring plan for the City of Stockton (City) and the County of San Joaquin (County), and 2) reductions in water quality monitoring in order to participate in the Delta Regional Monitoring Program (Delta RMP). Monitoring reductions are allowed by Order R5-2015-0024 (NPDES CAS083470) for Storm Water Discharges from Municipal Separate Storm Sewer Systems (MS4 Permit). On 4 November 2015, I approved the Alternative Monitoring Plan for the City and County.

I approve the proposed reductions in water quality monitoring according to Tables 1 and 2 (attached) in order for the City and County to participate in the Delta RMP. This approval does not reduce other monitoring requirements outside of Section III of the MS4 Permit's monitoring and reporting program.

The City and County estimates that their combined annual contribution of \$58,200 to the Delta RMP is reasonably equivalent to the costs the agencies would have incurred absent the monitoring reductions. While this letter approves reductions in water quality monitoring for participation in the Delta RMP, the Delta RMP Steering Committee ultimately will determine a process for defining adequate participation in the Delta RMP. The \$58,200 annual contribution is the minimum contribution to the Delta RMP in exchange for the reduced individual monitoring.

The reduced monitoring may begin in November 2015 on the condition that the City and County provide the fiscal year 2015-16 contribution to the Delta RMP by **15 January 2016**.

The City and County shall continue to adequately participate in the Delta RMP to maintain the reduced monitoring as described in Table 1 and 2. If adequate participation is not maintained, the Central Valley Water Board will require that the City and County reinstate the monitoring required by the Alternative Monitoring Plan.

If you have any questions about the Delta RMP or this approval, please contact Selina Cole at (916) 464-4683 or [selina.cole@waterboards.ca.gov](mailto:selina.cole@waterboards.ca.gov). If you have questions about NPDES CAS083470 monitoring requirements, please contact Elizabeth Lee at (916) 464-4787 or [elizabeth.lee@waterboards.ca.gov](mailto:elizabeth.lee@waterboards.ca.gov).

*Original Signed by Adam Laputz for*

Pamela C. Creedon  
Executive Officer

cc: Electronic copy only-  
RMP Steering Committee  
Karen Ashby, Larry Walker Associates, Inc.  
Ba Than, City of Stockton  
Brandon Nakagawa, San Joaquin County

**Table 1: Approved Monitoring Reductions for Participation in the Delta RMP - Urban Discharge**

MRP Section	Monitoring Locations		Alternative Monitoring Plan <sup>1</sup>			Approved Monitoring Reductions for Delta RMP Participation
			Constituents	Monitoring Type	Monitoring Frequency	Monitoring Frequency
III.C (Urban Discharge)	Calaveras River	CR-46	Table 1 of the MRP	Flow weighted & Grab	3 wet & 4 dry 2x every 6 years	3 wet & 4 dry 1x every 6 years
		CR-39	<i>E. coli</i> , fecal coliform, chlorpyrifos, pyrethroids, mercury, methylmercury, DO, and BOD	Grab	3 wet & 4 dry 2x every 6 years	
		CR-41				
		CR-42				
	Duck Creek	DC-65/ DC-66	Table 1 of the MRP	Flow weighted & Grab	3 wet & 4 dry 2x every 6 years	3 wet & 4 dry 1x every 6 years
		DC-69	<i>E. coli</i> , fecal coliform, chlorpyrifos, pyrethroids, mercury, methylmercury, DO, and BOD	Grab	3 wet & 4 dry 2x every 6 years	
		WK-64				
	Mosher Slough	MS-14	Table 1 of the MRP	Flow weighted & Grab	3 wet & 4 dry 2x every 6 years	3 wet & 4 dry 1x every 6 years
		MS-2D	<i>E. coli</i> , fecal coliform, chlorpyrifos, pyrethroids, mercury, and methylmercury	Grab	3 wet & 4 dry 2x every 6 years	
		MS-4D				
		MS-13				
	Smith Canal	SC-1	Table 1 of the MRP	Flow weighted & Grab	3 wet & 4 dry 2x every 6 years	3 wet & 4 dry 1x every 6 years
		SC-2D	<i>E. coli</i> , fecal coliform, chlorpyrifos, and pyrethroids	Grab	3 wet & 4 dry 2x every 6 years	
		SC-4D				
	Mormon Slough	MM-142	<i>E. coli</i> , fecal coliform, DO, and BOD	Grab	3 wet & 4 dry 2x every 6 years	3 wet & 4 dry 1x every 6 years
		MR-2D				
	Five-Mile Slough	5M-25	<i>E. coli</i> , fecal coliform, chlorpyrifos, pyrethroids, DO, and BOD			
		5M-26				
		5M-28				

<sup>1</sup> Additional details describing the monitoring locations, constituents, and sampling requirements are included in the Central Valley Water Board 4 November 2015 approval letter for the City of Stockton and County of San Joaquin's Alternative Monitoring Plan.

**Table 2: Approved Monitoring Reductions for Participation in the Delta RMP - Receiving Water & Water Column and Sediment Toxicity**

MRP Section	Monitoring Locations		Alternative Monitoring Plan <sup>1</sup>			Approved Monitoring Reductions for Delta RMP Participation
			Constituents	Monitoring Type	Monitoring Frequency	Monitoring Frequency
III.D (Receiving Water)	Calaveras River	CR-46RUS/ CR-1R (Upstream)	<i>E. coli</i> , fecal coliform, chlorpyrifos, pyrethroids, mercury, methylmercury, DO, and BOD	Grab	3 wet & 4 dry 2x every 6 years	3 wet & 4 dry 1x every 6 years
		CR-46R (Downstream)	Table 1 of the MRP			
		CR-39R (Downstream)	<i>E. coli</i> , fecal coliform, chlorpyrifos, pyrethroids, mercury, methylmercury, DO, and BOD			
		CR-41R (Downstream)	<i>E. coli</i> , fecal coliform, chlorpyrifos, pyrethroids, mercury, methylmercury, DO, and BOD			
	Duck Creek	DC-65R/ DC-66R (Downstream)	Table 1 of the MRP	Grab	3 wet & 4 dry 2x every 6 years	3 wet & 4 dry 1x every 6 years
		DC-65RUS (Upstream)	<i>E. coli</i> , fecal coliform, chlorpyrifos, pyrethroids, mercury, methylmercury, DO, and BO			
		WK-64R (Downstream)	<i>E. coli</i> , fecal coliform, chlorpyrifos, pyrethroids, mercury, methylmercury, DO, and BO			
	Mosher Slough	MS-14RUS (Upstream)	<i>E. coli</i> , fecal coliform, chlorpyrifos, pyrethroids, mercury, methylmercury	Grab	3 wet & 4 dry 2x every 6 years	3 wet & 4 dry 1x every 6 years
		MS-14R (Downstream)	Table 1 of the MRP			
		NW-Rain	Total mercury and total methylmercury, chlorpyrifos, diazinon, and pyrethroids	-	3 wet, annually	No reductions
		NE-Rain	Total mercury and total methylmercury, chlorpyrifos, diazinon and pyrethroids			
		MS-2R (Downstream)	<i>E. coli</i> , fecal coliform, chlorpyrifos, pyrethroids, mercury, and methylmercury	Grab	3 wet & 4 dry 2x every 6 years	3 wet & 4 dry 1x every 6 years
	Smith Canal	SC-1R (Downstream)	Table 1 of the MRP	Grab	3 wet & 4 dry 2x every 6 years	3 wet & 4 dry 1x every 6 years
		SC-2R (Downstream)	<i>E. coli</i> , fecal coliform, chlorpyrifos, and pyrethroids			
		SC-4R (Downstream)	<i>E. coli</i> , fecal coliform, chlorpyrifos, and pyrethroids			

MRP Section	Monitoring Locations		Alternative Monitoring Plan <sup>1</sup>			Approved Monitoring Reductions for Delta RMP Participation
			Constituents	Monitoring Type	Monitoring Frequency	Monitoring Frequency
III.D (Receiving Water)	Smith Canal	SC-Rain	Total mercury and total methylmercury, chlorpyrifos, and pyrethroids	-	3 wet, annually	No reduction
	Mormon Slough	MR-2R	<i>E. coli</i> , fecal coliform, DO, and BOD	Grab	3 wet & 4 dry 2x every 6 years	3 wet & 4 dry 1x every 6 years
		MR-4R				
	Five-Mile Slough	5M-25R	<i>E. coli</i> , fecal coliform, chlorpyrifos, pyrethroids, DO, and BOD	Grab	3 wet & 4 dry 2x every 6 years	3 wet & 4 dry 1x every 6 years
		5M-26R				
		5M-28R				
III.E (Water Column Toxicity)	Calaveras River	CR-46R (Downstream)	Water Column Toxicity	Grab	1 wet & 1 dry 2x every 6 years	1 wet & 1 dry 1x every 6 years
	Duck Creek	DC-65R/ DC-66R (Downstream)				
	Mosher Slough	MS-14R (Downstream)				
	Smith Canal	SC-1R (Downstream)				
III.G (Sediment Toxicity)	Calaveras River	CR-46R	Sediment Toxicity	-	1 wet & 2 dry 2x every 6 years	1 wet & 2 dry 1x every 6 years
	Duck Creek	WK-64R				
	Mosher Slough	MS-14R				
	Smith Canal	SC-5R				

<sup>1</sup>Additional details describing the monitoring locations, constituents, and sampling requirements are included in the Central Valley Water Board 4 November 2015 approval letter for the City of Stockton and County of San Joaquin's Alternative Monitoring Plan.



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## **Appendix E**

City of Stockton and County of San Joaquin  
Correspondence with Central Valley  
Regional Water Board Regarding  
COVID-19 Pandemic, April-May 2020

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## CITY OF STOCKTON

MUNICIPAL UTILITIES • 2500 Navy Drive • Stockton, CA 95206 • 209-937-8700  
[www.stocktongov.com](http://www.stocktongov.com)

April 7, 2020

Mr. Patrick Pulupa  
Executive Officer  
California Regional Water Quality Control Board, Central Valley Region  
11020 Sun Center Drive, Suite 200  
Rancho Cordova, CA 95670-6114

Sent via email: [Kari.Holmes@waterboards.ca.gov](mailto:Kari.Holmes@waterboards.ca.gov)

### **CITY OF STOCKTON REQUEST FOR TEMPORARY REGULATORY RELIEF WITH SELECT WATER BOARD REQUIREMENTS DURING THE CORONAVIRUS 2019 (COVID-19) EMERGENCY**

Dear Mr. Pulupa:

The City of Stockton (City) is writing to you to request temporary, regulatory relief from select requirements of the region-wide National Pollutant Discharge Elimination System (NPDES) and Waste Discharge Requirements (WDR) General Permit for Discharges from Municipal Separate Storm Sewer Systems (MS4) (Region-wide Permit)<sup>1</sup> and associated Work Plan<sup>2</sup> during this public health emergency. The focus of this request is on those activities that are required or likely to occur during March – May 2020.

As you are aware, on March 19, 2020, the California State Public Health Officer and Director of the California Department of Public Health ordered all individuals living in the State of California to stay home or at their place of residence, except as needed to maintain continuity of operation of the federal critical infrastructure sectors<sup>3</sup> (Executive Order N-33-20).

In addition, on March 20, 2020, the State Water Resources Control Board (State Water Board) issued a statement regarding compliance with Water Board Requirements during

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<sup>1</sup> Order No. R5-2016-0040-002;

[https://www.waterboards.ca.gov/centralvalley/board\\_decisions/adopted\\_orders/general\\_orders/r5-2016-0040\\_ms4.pdf](https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0040_ms4.pdf)

<sup>2</sup> Letter from the City of Stockton and County of San Joaquin to the Regional Water Board, November 1, 2016, *City of Stockton and County of San Joaquin Central Valley Municipal Stormwater General permit NOI Application Package*, including Attachment D, *City of Stockton and County of San Joaquin SWMP Annual Work Plan*.

<sup>3</sup> <https://covid19.ca.gov/stay-home-except-for-essential-needs/>

## CITY OF STOCKTON REQUEST FOR TEMPORARY REGULATORY RELIEF WITH SELECT WATER BOARD REQUIREMENTS DURING THE CORONAVIRUS 2019 (COVID-19) EMERGENCY

the Coronavirus 2019 (COVID-19) emergency<sup>4</sup>. Critical statements in that correspondence include:

*....timely compliance by the regulated community with all Water Board orders and other requirements (including regulations, permits, contractual obligations, primacy delegations, and funding conditions) is generally considered to be an essential function during the COVID-19 response. As a result, the Water Boards consider compliance with board-established orders and other requirements to be within the essential activities, essential governmental functions, or comparable exceptions to shelter-in-place directives provided by local public health officials.*

*If there is a specific Water Board order or requirement that cannot be timely met because it would be inconsistent with current governmental directives or guidelines related to COVID-19, the entity responsible for compliance with the Water Board order or requirement must notify the applicable Water Board immediately.*

Consistent with the State Water Board directive, this letter is being submitted to the Central Valley Regional Water Quality Control Board (Regional Water Board) to identify the specific regulatory requirements that cannot currently be met since they would be inconsistent with current governmental directives or guidelines related to COVID-19, especially those that relate to the requirement to shelter in place, group gatherings, social distancing, and the ability to have reliable access to sanitary facilities and supplies in order to wash hands and/or disinfect equipment.

For each item below, the following information is provided:

- Specific Water Board order, regulation, permit, or other requirement that cannot be timely met;
- The inconsistent COVID-19 directive or guideline;
- An explanation of why the responsible entity cannot timely meet the Water Board order or requirement; and
- Any action that the entity will take in lieu of complying with the specific Water Board order or requirement.

The specific regulatory requirements that the City is requesting be temporarily suspended and the corresponding rationale are summarized below and noted in bold text.

### *Region-wide Permit*

The Region-wide Permit requires that the City develop a revised Stormwater Management Plan (SWMP) consistent with Provisions V.C-E. and the timeline in V.F. Pursuant to Provision V.C.9:

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<sup>4</sup> [https://www.waterboards.ca.gov/resources/covid-19\\_updates/](https://www.waterboards.ca.gov/resources/covid-19_updates/)



## **CITY OF STOCKTON REQUEST FOR TEMPORARY REGULATORY RELIEF WITH SELECT WATER BOARD REQUIREMENTS DURING THE CORONAVIRUS 2019 (COVID-19) EMERGENCY**

“Between a Permittee’s receipt of a NOA and approval of its SWMP, a Permittee’s full compliance with all of the following requirements shall constitute the Permittee’s compliance with Parts II.A, III.B, and IV:

- a. The Permittee’s NOI was timely submitted in accordance with Part V.B.1;
- b. The Permittee meets all deadlines for development of a SWMP; and
- c. The Permittee continues full implementation of its existing Storm Water Management Program.”

The City has and is continuing to comply with all of the Region-wide Permit requirements. This includes the submittal of the NOI (Provision V.B.1), which provided an Annual Work Plan so that it is clear how the current, 2012 SWMP is being implemented and reported on until such time as the revised SWMP is approved by the Regional Water Board. The Work Plan items that are of concern during the public health emergency are outlined below.

### **Public Outreach - Cessation of In-Person Public Education Events**

Due to the shelter-in-place and social distancing requirements as well as the school and many business closures, the City cannot conduct public education activities that involve interfacing with the public. This includes:

- Organizing, supporting, and/or participating in stream cleanup events;
- Participating in community-wide events;
- Providing community relations;
- Implementing pesticide outreach efforts for staff, residents, retail stores, and PCOs; and
- Reaching out to school age children.

In fact, many of the events that were planned for March, April, and May of 2020 have already been cancelled by the sponsoring agency/group. In lieu of conducting and/or participating in these events, the City will continue to outreach through other media and platforms such as the website.

### **Industrial and Commercial – Cessation of Routine Industrial and Commercial Inspections**

As a result of the Executive Order, many industrial and commercial businesses are either closed or operating with limited staff and focused on the essential activities necessary to stay in business. As a result of the closures, increased stress that the businesses are under, and need for social distancing, the City is going to cease routine industrial and commercial inspections and the in-person distribution of educational materials. However, consistent with the Illicit Discharge Program Element, the City will continue to respond to water pollution complaints as needed.

**CITY OF STOCKTON REQUEST FOR TEMPORARY REGULATORY RELIEF WITH  
SELECT WATER BOARD REQUIREMENTS DURING THE CORONAVIRUS 2019  
(COVID-19) EMERGENCY**

**Monitoring Program – Potential Reduction/postponement of Monitoring  
Events**

The City has two dry weather monitoring events in Mormon Slough remaining for 2020. One of these events is targeted for April and one is targeted for late May/June. Although these monitoring events may be able to be completed, they are challenging locations due to the number of people that tend to congregate in these areas, which would compromise the ability for personnel to safely maintain social distancing protocols. Prior to scheduling the dry weather events, staff will conduct a site reconnaissance of the locations within a week of the targeted sampling date to assess the site conditions. If the conditions are conducive to conducting the monitoring event then it will be completed. If they are not, then the event will either be postponed or missed (if there are several site reconnaissance visits that indicate that the event cannot be safely conducted). Other concerns which may impact the ability of staff to complete the monitoring events include the monitoring events require 2-3 staff to work in close proximity for an extended period in order to collect the requisite data, the monitoring approach requires staff to travel to multiple locations which increases the probability of coming into contact with other members of the public, at many of the locations soap and water is not readily available for staff to wash their hands and disinfect equipment. However, the City can resume the monitoring schedule once the Executive Order is lifted.

Per this correspondence, we are requesting that the requirements listed above, be temporarily suspended until the California State Public Health Officer and Director of the California Department of Public Health and/or Governor Newsom lift the Executive Order.

If you have any questions, please contact me at (209) 937-8792 or [Jason.Farnsworth@stocktonca.gov](mailto:Jason.Farnsworth@stocktonca.gov).



JASON FARNSWORTH  
DEPUTY DIRECTOR OF MUNICIPAL UTILITIES

Cc: Adam Laputz, Central Valley Regional Water Quality Control Board  
Bryan Smith, Central Valley Regional Water Quality Control Board  
Elizabeth Lee, Central Valley Regional Water Quality Control Board  
Jason Farnsworth, City of Stockton  
Mario Caballero, City of Stockton  
Alan Montanelli, City of Stockton  
Karen Ashby, Larry Walker Associates

## Central Valley Regional Water Quality Control Board

12 May 2020

Matt Zidar  
County of San Joaquin  
P.O. Box 1810  
Stockton, CA 95201  
Sent via E-mail: [mzidar@sigov.org](mailto:mzidar@sigov.org)

### **EXTENSION REQUEST, ORDER R5-2016-0040, COUNTY OF SAN JOAQUIN MUNICIPAL SEPARATE STORM SEWER SYSTEM**

Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff received a request from the County of San Joaquin for a suspension of in-person public education events, routine industrial and commercial inspections, and two dry weather monitoring events in the subject Order for the County of San Joaquin's municipal separate storm sewer system on 28 April 2020. The request was received in response to concerns from the COVID-19 (virus) pandemic.

The Central Valley Water Board considers public health and safety our utmost priority. As such, we value the safety of the regulated community and the public and do not want to put anyone at unnecessary risk for contracting the virus. Nevertheless, even with "Shelter-In-Place" orders issued for California in response to the virus, timely compliance by the regulated community with all Water Board orders and other requirements is generally considered to be an essential function during the COVID-19 response. Therefore, the requirements of Order R5-2016-0040 still apply, and progress toward safely meeting the requirements of the Order should continue as practicable.

However, under the current circumstances, based on the information provided, the request to suspend in-person public education events and two dry weather monitoring events until further notice is approved. Compliance with this requirement must commence again upon notification from the Central Valley Water Board. The Central Valley Water Board will not consider the delay in complying with this requirement as an enforcement priority due to health and safety complications associated with COVID-19.

In addition, based on the information provided, the request to suspend industrial and commercial inspections is denied. Industrial and commercial inspections are still considered essential under most shelter-in-place orders and can be performed in compliance with current governmental directives and safety guidelines related to COVID-19.



The Central Valley Water Board will continue monitoring the impacts of the COVID-19 pandemic and may provide further guidance on how to safely comply with Order R5-2016-0040 as we gain more information. If you have any questions or concerns, please feel free to reach out to Elizabeth Lee at [Elizabeth.Lee@waterboards.ca.gov](mailto:Elizabeth.Lee@waterboards.ca.gov).

Patrick Pulupa  
Executive Officer

cc: [via E-mail]  
Bryan Smith, Central Valley Regional Water Quality Control Board, Redding  
Kari Holmes, Central Valley Regional Water Quality Control Board, Rancho  
Cordova  
Alex Mushegan, Central Valley Regional Water Quality Control Board, Fresno



**SAN JOAQUIN**  
—COUNTY—  
*Greatness grows here.*



**Department of Public Works**

**Kris Balaji, Director of Public Works**

**Fritz Buchman, Deputy Director/Development**

**Jim Stone, Deputy Director/Operations**

**Najee Zarif, Interim Deputy Director/Engineering**

**Kristi Rhea, Manager of Strategic Initiatives**

Mr. Patrick Pulupa, Executive Officer  
California Regional Water Quality Control Board, Central Valley Region  
11020 Sun Center Drive, Suite 200  
Rancho Cordova, California 95670-6114

Sent via email: [Kari.Holmes@waterboards.ca.gov](mailto:Kari.Holmes@waterboards.ca.gov)

**SUBJECT: COUNTY OF SAN JOAQUIN (PHASE I AREA) REQUEST FOR  
TEMPORARY REGULATORY RELIEF WITH SELECT WATER BOARD  
REQUIREMENTS DURING THE CORONAVIRUS 2019 EMERGENCY**

Dear Mr. Pulupa:

The San Joaquin County Department of Public Works (County) is writing to request temporary, regulatory relief from select requirements of the region-wide National Pollutant Discharge Elimination System and Waste Discharge Requirements (WDR) General Permit for Discharges from Municipal Separate Storm Sewer Systems (MS4) (Region-wide Permit)<sup>1</sup> and associated Work Plan<sup>2</sup> during this public health emergency. The focus of this request is on those activities that are required or likely to occur during March 2020 through May 2020.

As you are aware, on March 19, 2020, the California State Public Health Officer and Director of the California Department of Public Health ordered all individuals living in the State of California to stay at home or at their place of residence, except as needed to maintain continuity of operation of the Federal critical infrastructure sectors<sup>3</sup> (Executive Order N-33-20).

In addition, on March 20, 2020, the State Water Resources Control Board (State Water Board) issued a statement regarding compliance with Water Board Requirements during the Coronavirus 2019 (COVID-19) emergency<sup>4</sup>.

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<sup>1</sup> Order No. R5-2016-0040-002;

[https://www.waterboards.ca.gov/centralvalley/board\\_decisions/adopted\\_orders/general\\_orders/r5-2016-0040\\_ms4.pdf](https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0040_ms4.pdf)

<sup>2</sup> Letter from the City of Stockton and County of San Joaquin to the Regional Water Board, November 1, 2016, *City of Stockton and County of San Joaquin Central Valley Municipal Stormwater General permit NOI Application Package*, including Attachment D, *City of Stockton and County of San Joaquin SWMP Annual Work Plan*.

<sup>3</sup> <https://covid19.ca.gov/stay-home-except-for-essential-needs/>

<sup>4</sup> [https://www.waterboards.ca.gov/resources/covid-19\\_updates/](https://www.waterboards.ca.gov/resources/covid-19_updates/)

COUNTY OF SAN JOAQUIN (PHASE I AREA) REQUEST FOR TEMPORARY  
REGULATORY RELIEF WITH SELECT WATER BOARD REQUIREMENTS DURING  
THE CORONAVIRUS 2019 EMERGENCY

Critical statements in that correspondence include:

*....timely compliance by the regulated community with all Water Board orders and other requirements (including regulations, permits, contractual obligations, primacy delegations, and funding conditions) is generally considered to be an essential function during the COVID-19 response. As a result, the Water Boards consider compliance with board-established orders and other requirements to be within the essential activities, essential governmental functions, or comparable exceptions to shelter-in-place directives provided by local public health officials. If there is a specific Water Board order or requirement that cannot be timely met because it would be inconsistent with current governmental directives or guidelines related to COVID-19, the entity responsible for compliance with the Water Board order or requirement must notify the applicable Water Board immediately.*

Consistent with the State Water Board directive, this letter is being submitted to the Central Valley Regional Water Quality Control Board (Regional Water Board) to identify the specific regulatory requirements that cannot currently be met since they would be inconsistent with current governmental directives or guidelines related to COVID-19, especially those that relate to the requirement to shelter-in-place, group gatherings, social distancing, and the ability to have reliable access to sanitary facilities and supplies in order to wash hands and/or disinfect equipment.

For each item below, the following information is provided:

- Specific Water Board order, regulation, permit, or other requirement that cannot be timely met;
- The inconsistent COVID-19 directive or guideline;
- An explanation of why the responsible entity cannot timely meet the Water Board order or requirement; and,
- Any action that the entity will take in lieu of complying with the specific Water Board order or requirement.

The specific regulatory requirements that the County is requesting be temporarily suspended and the corresponding rationale are summarized below and noted in bold text.

*Region-wide Permit*

The Region-wide Permit requires that the County develop a revised Stormwater Management Plan (SWMP) consistent with Provisions V.C-E. and the timeline in V.F. Pursuant to Provision V.C.9:

COUNTY OF SAN JOAQUIN (PHASE I AREA) REQUEST FOR TEMPORARY  
REGULATORY RELIEF WITH SELECT WATER BOARD REQUIREMENTS DURING  
THE CORONAVIRUS 2019 EMERGENCY

"Between a Permittee's receipt of a NOA and approval of its SWMP, a Permittee's full compliance with all of the following requirements shall constitute the Permittee's compliance with Parts II.A, III.B, and IV:

- a. The Permittee's NOI was timely submitted in accordance with Part V.B.1;
- b. The Permittee meets all deadlines for development of a SWMP; and,
- c. The Permittee continues full implementation of its existing Storm Water Management Program."

The County has and is continuing to comply with all of the Region-wide Permit requirements. This includes the submittal of the NOI (Provision V.B.1), which provided an Annual Work Plan so that it is clear how the current, 2012 SWMP is being implemented and reported on, until such time as the revised SWMP is approved by the Regional Water Board. The Work Plan items that are of concern during the public health emergency are outlined below.

**Public Outreach - Cessation of In-Person Public Education Events**

Due to the shelter-in-place and social distancing requirements, as well as the school and many business closures, the County cannot conduct public education activities that involve interfacing with the public. This includes:

- Organizing, supporting, and/or participating in stream cleanup events;
- Participating in community-wide events;
- Providing community relations;
- Implementing pesticide outreach efforts for staff, residents, retail stores, and PCOs; and,
- Reaching out to school age children.

In fact, many of the events that were planned for March, April, and May of 2020 have already been cancelled by the sponsoring agency/group. In lieu of conducting and/or participating in these events, the County will continue to outreach through other media and platforms such as the website.

**Industrial and Commercial – Cessation of Routine Industrial and Commercial Inspections**

As a result of the Executive Order, many industrial and commercial businesses are either closed or operating with limited staff and focused on the essential activities necessary to stay in business. As a result of the closures, increased stress that the businesses are under, and need for social distancing, the County is going to cease routine industrial and commercial inspections and the in-person distribution of educational materials. However, consistent with the Illicit Discharge Program

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Element, the County will continue to respond to water pollution complaints as needed.

**Monitoring Program – Potential Reduction/postponement of Monitoring Events**

The City of Stockton (City) and the County have two dry weather monitoring events in Mormon Slough remaining for 2020. One of these events is targeted for April and one is targeted for late May/June. Although these monitoring events may be able to be completed, they are challenging locations due to the number of people that tend to congregate in these areas, which would compromise the ability for personnel to safely maintain social distancing protocols. Prior to scheduling the dry weather events, staff will conduct a site reconnaissance of the locations within a week of the targeted sampling date to assess the site conditions. If the conditions are conducive to conducting the monitoring event then it will be completed. If they are not, then the event will either be postponed or missed (if there are several site reconnaissance visits that indicate that the event cannot be safely conducted). Other concerns which may impact the ability of staff to complete the monitoring events include the monitoring events require two to three staff to work in close proximity for an extended period in order to collect the requisite data, the monitoring approach requires staff to travel to multiple locations, which increases the probability of coming into contact with other members of the public, at many of the locations soap and water is not readily available for staff to wash their hands and disinfect equipment. However, the City and County can resume the monitoring schedule once the Executive Order is lifted.

Per this correspondence, the County is requesting that the requirements listed above, be temporarily suspended until the California State Public Health Officer and Director of the California Department of Public Health and/or Governor Newsom lift the Executive Order.

Should you have any questions, please contact me at (209) 953-7460, or by email at [mzidar@sigov.org](mailto:mzidar@sigov.org).

Sincerely,

A handwritten signature in blue ink, appearing to read "Matt Zidar", is shown on a light blue background.

MATT ZIDAR

Mr. Patrick Pulupa, Executive Officer 5

Eileen Sobeck, Executive Director

COUNTY OF SAN JOAQUIN (PHASE I AREA) REQUEST FOR TEMPORARY  
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Water Resources Manager

MZ:JJ:me

WR-20D041-ME1

Enclosure

c: Karen Ashby, Larry Walker Associates  
Adam Laputz, Central Valley Regional Water Quality Control Board  
Elizabeth Lee, Central Valley Regional Water Quality Control Board  
Bryan Smith, Central Valley Regional Water Quality Control Board  
Jessica Jones, County of San Joaquin  
Roy Valadez, County of San Joaquin

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## Central Valley Regional Water Quality Control Board

12 May 2020

Matt Zidar  
County of San Joaquin  
P.O. Box 1810  
Stockton, CA 95201  
Sent via E-mail: [mzidar@sigov.org](mailto:mzidar@sigov.org)

### **EXTENSION REQUEST, ORDER R5-2016-0040, COUNTY OF SAN JOAQUIN MUNICIPAL SEPARATE STORM SEWER SYSTEM**

Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff received a request from the County of San Joaquin for a suspension of in-person public education events, routine industrial and commercial inspections, and two dry weather monitoring events in the subject Order for the County of San Joaquin's municipal separate storm sewer system on 28 April 2020. The request was received in response to concerns from the COVID-19 (virus) pandemic.

The Central Valley Water Board considers public health and safety our utmost priority. As such, we value the safety of the regulated community and the public and do not want to put anyone at unnecessary risk for contracting the virus. Nevertheless, even with "Shelter-In-Place" orders issued for California in response to the virus, timely compliance by the regulated community with all Water Board orders and other requirements is generally considered to be an essential function during the COVID-19 response. Therefore, the requirements of Order R5-2016-0040 still apply, and progress toward safely meeting the requirements of the Order should continue as practicable.

However, under the current circumstances, based on the information provided, the request to suspend in-person public education events and two dry weather monitoring events until further notice is approved. Compliance with this requirement must commence again upon notification from the Central Valley Water Board. The Central Valley Water Board will not consider the delay in complying with this requirement as an enforcement priority due to health and safety complications associated with COVID-19.

In addition, based on the information provided, the request to suspend industrial and commercial inspections is denied. Industrial and commercial inspections are still considered essential under most shelter-in-place orders and can be performed in compliance with current governmental directives and safety guidelines related to COVID-19.



The Central Valley Water Board will continue monitoring the impacts of the COVID-19 pandemic and may provide further guidance on how to safely comply with Order R5-2016-0040 as we gain more information. If you have any questions or concerns, please feel free to reach out to Elizabeth Lee at [Elizabeth.Lee@waterboards.ca.gov](mailto:Elizabeth.Lee@waterboards.ca.gov).

Patrick Pulupa  
Executive Officer

cc: [via E-mail]  
Bryan Smith, Central Valley Regional Water Quality Control Board, Redding  
Kari Holmes, Central Valley Regional Water Quality Control Board, Rancho  
Cordova  
Alex Mushegan, Central Valley Regional Water Quality Control Board, Fresno