

**CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD, SAN DIEGO REGION**

**WATER QUALITY RESTORATION PLAN FOR NUTRIENT
REDUCTION IN FAMOSA SLOUGH:
ALTERNATIVE APPROACH TO A NUTRIENT TOTAL
MAXIMUM DAILY LOAD**



STAFF REPORT

November 2017

STATE OF CALIFORNIA

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1 EXECUTIVE SUMMARY

Famosa Slough is on the Clean Water Act (CWA) section 303(d) list of impaired water bodies for eutrophic conditions. Excessive nutrients in a water body can cause eutrophic conditions. Nutrient pollution is the single largest pollution problem affecting coastal waters in the United States.¹ Common signs of eutrophication are high levels of algal growth, low dissolved oxygen concentrations, and nuisance conditions created by algal decay. In coastal waters, these conditions stress the aquatic organisms and impair ecosystem and recreational beneficial uses.

Famosa Slough is a 37-acre tidal wetland south of the San Diego River in San Diego, California. It is a designated [State Marine Conservation Area](#), and it provides estuarine habitat for waterfowl and wildlife. Reductions in nutrient loads are necessary to restore Famosa Slough beneficial uses. The surrounding areas within the City of San Diego (City) contribute excessive nutrients into Famosa Slough primarily through year-round non-storm water discharges.

The California Water Quality Control Board, San Diego Region (San Diego Water Board) formed a stakeholder group to develop a nutrient Total Maximum Daily Load (TMDL) for Famosa Slough. The group consisted of the City, Tetra Tech, Inc. (City's consultant), and the [Friends of Famosa Slough](#) (a 501(c)(3) organization). The City developed a draft TMDL technical report² to identify the nutrient sources, estimate the nutrient loads and allocations, and evaluate management scenarios using computer models. Modeling results indicate that a 37 percent nutrient load reduction from the Famosa Slough watershed combined with twice-a-year algae harvesting will restore beneficial uses in an economically efficient manner within a reasonable time frame. The City can achieve the necessary nutrient load reductions identified in the TMDL development process to restore Famosa Slough with actions taken in compliance with the existing regional municipal storm water permit, Order No. R9-2013-0001, *National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds within the San Diego Region*, as amended ([Region MS4 Permit](#)).

¹ [National Oceanic and Atmospheric Administration \(NOAA\)](#).

² *Famosa Slough Nutrients / Eutrophication Total Maximum Daily Loads*, prepared for the City of San Diego Transportation and Storm Water Department, prepared by Tetra Tech, 2017.

One of the goals in [USEPA's 2013 Vision](#) for the CWA Section 303(d) Program encourages states to choose the most effective regulatory actions to promote and expedite restoration and protection of water quality. In addition to TMDL development, a major focus is to identify, evaluate and promote other regulatory actions that may be more immediately beneficial or practicable to achieving water quality standards. In this case, focused activities performed in compliance with the Regional MS4 Permit will be the alternative regulatory action used to expedite attainment of water quality standards in lieu of adopting a nutrient TMDL for Famosa Slough as an amendment to the *Water Quality Control Plan for the San Diego Basin* ([Basin Plan](#)).

The use of existing regulatory programs to promote cost effective and timely restoration activities to address the eutrophic conditions in Famosa Slough is consistent with the State Water Resource Control Board's (State Water Board) [Water Quality Control Policy for Addressing Impaired Water and Associated Guidance](#). It is also consistent with the San Diego Water Board's [Practical Vision](#) to achieve healthy waters through collaboration, reliance on the latest science, prioritizing and using meaningful environmental outcomes as measures of success.

As a result, it is reasonable for the San Diego Water Board to use an alternative approach in lieu of finalizing a nutrient TMDL as a Basin Plan amendment to address water quality issues in Famosa Slough. The San Diego Water Board can postpone adopting a TMDL in favor of relying on, and verifying successful actions specified in the existing Regional MS4 Permit. The San Diego Water Board can reinstate the TMDL process or initiate compliance actions if the verification monitoring does not show progress.

This staff report summarizes information required by USEPA regarding TMDLs developed by states. It also describes the actions that can be documented through compliance with the Regional MS4 Permit. The technical information is based on the Famosa Slough TMDL stakeholder process and a draft TMDL technical report prepared by Tetra Tech, Inc. for the City of San Diego.

2 FAMOSA SLOUGH OVERVIEW

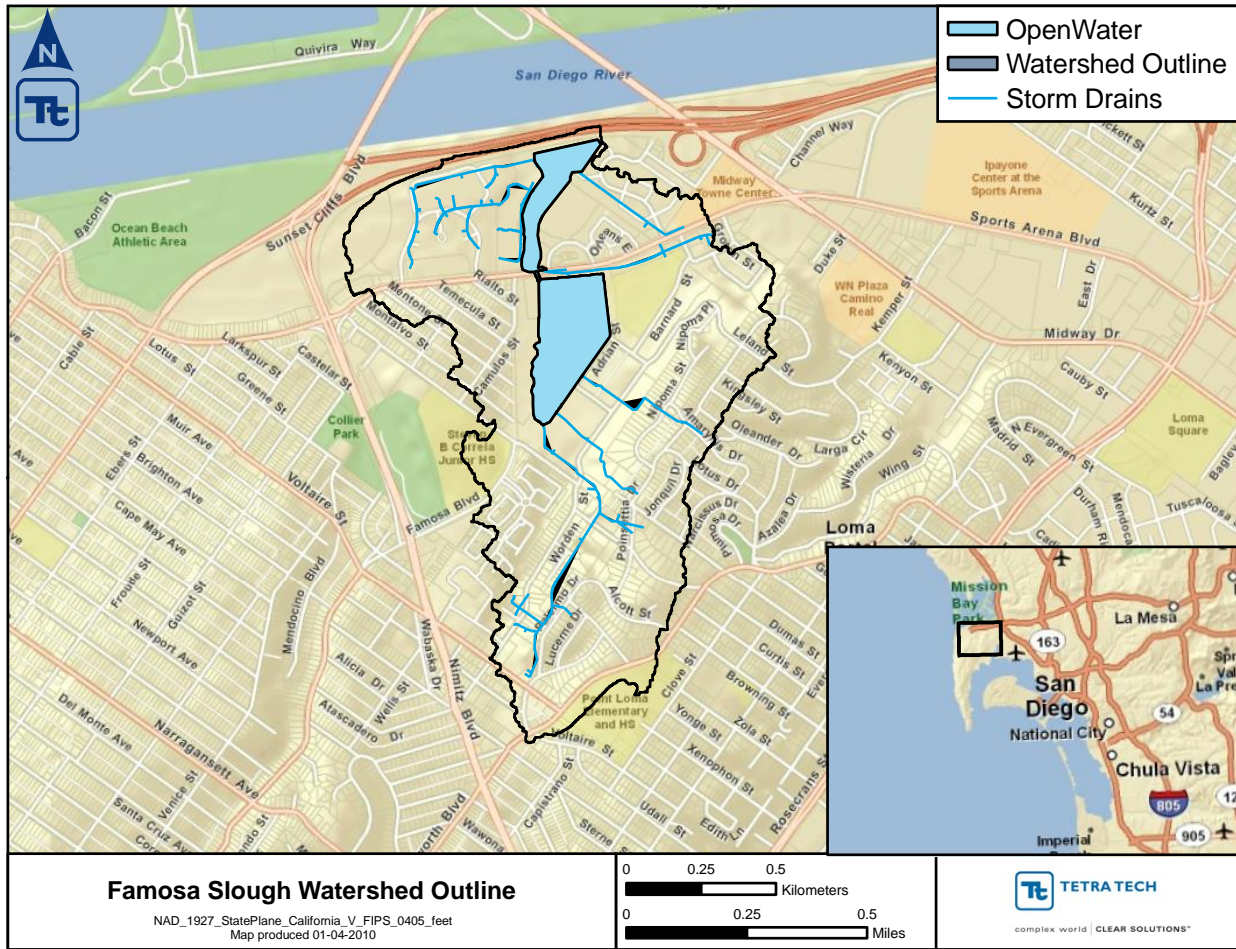
Famosa Slough is a 37-acre estuarine wetland south of the San Diego River and approximately 1.25 miles east of the Pacific Ocean in San Diego, California. Famosa Slough is a remnant of the once extensive Mission Bay wetland complex known as False Bay. Famosa Slough provides habitat for shore birds and wildlife. It is a significant feeding and resting site for migratory birds. Famosa Slough is located within the San Diego Hydrologic Unit, Lower San Diego Hydrologic Area, Mission San Diego Hydrologic Sub-Area (907.11) as defined by the Basin Plan. In the National Hydrography Dataset, it is also defined as HUC 12 - 180703041102.

Within the San Diego Hydrologic Unit, the Famosa Slough watershed is 358 acres located immediately adjacent to the slough (Figure 1). Surface and groundwaters drain directly into Famosa Slough from this area. There are approximately 3.8 linear miles of storm drain network in the watershed that drain into Famosa Slough. Urban development primarily surrounds Famosa Slough and bisects it into two areas, a 12-acre channel and a 25-acre open water area. Famosa Slough receives salt water from the tidally-influenced section of the San Diego River through culverts beneath Interstate 8 and West Point Loma Boulevard. Storm water and non-storm water discharges are sources of freshwater from the surrounding neighborhoods. Based on land uses in the Famosa Slough watershed, the draft TMDL technical report indicates that the City is responsible for 97 percent, and Caltrans is responsible for 3 percent of the area surrounding Famosa Slough that contribute storm and non-storm water discharges.

Eutrophic conditions within Famosa Slough restrict its ability to fully support ecosystem and recreational beneficial uses designated in the Basin Plan. As a result, the San Diego Water Board placed Famosa Slough on the 1990 CWA section 303(d) list of impaired water bodies. The impairment is eutrophic conditions characterized by excessive algal growth predominately during warm summer months.

Eutrophic conditions are created by excessive nutrient loading into a water body. This stimulates excessive aquatic plant and algal growth, and leads to low dissolved oxygen concentrations at night and during periods of high algal decay. In Famosa Slough, eutrophic conditions are most apparent during the summer dry-weather season. Excessive algal growth occurs and appears as floating algal mats in the open water areas. Non-storm water flows from the local watershed and internal nutrient cycling in Famosa Slough are identified in the draft TMDL technical report as the most significant sources of nutrients, as total nitrogen and total phosphorus, causing the eutrophic conditions.

Figure 1. Location of the Famosa Slough watershed.



3 TOTAL MAXIMUM DAILY LOAD (TMDL) PROCESS

A TMDL is the maximum amount of a pollutant that a water body can assimilate and maintain water quality sufficient to meet its beneficial uses. Once the total maximum pollutant load has been calculated, it is allocated among contributing sources in the watershed. A TMDL allocates pollutant loads to point sources as waste load allocations (WLA), to non-point sources as load allocations (LA), and to a margin of safety (MOS) to account for uncertainties and unknowns. Mathematically, the TMDL can be expressed as:

$$TMDL = WLA + LA + MOS$$

The San Diego Water Board is required to develop TMDLs in accordance with CWA section 303(d) and the State Water Board policy for addressing impaired water bodies. Conventional TMDL projects culminate in a Basin Plan amendment with subsequent permit actions. Additionally, they can also lead to other regulatory actions that include delisting a water body, changing water quality standards, or using a single order, like a permit or enforcement action, to address water quality impairments.

From 2006-2017, the San Diego Water Board worked in conjunction with local stakeholders to investigate the water quality conditions, identify sources of pollutants, loading capacities, and existing control requirements affecting the eutrophic conditions. This information was used to develop draft TMDLs for the pollutants affecting the eutrophic conditions in Famosa Slough and an implementation plan to achieve the draft TMDL goals. The estimated nutrient loads and allocations are summarized in the draft TMDL technical report.

4 WATER QUALITY STANDARDS

CWA section 303 and California Water Code (Water Code) section 13240 require that the San Diego Water Board establish water quality standards for each water body within its Region. Water quality standards include designated beneficial uses, water quality objectives (WQOs), antidegradation requirements, and implementation policies. The Basin Plan identifies the water quality standards applicable to Famosa Slough and contains implementation programs to achieve water quality standards.

The ecosystem beneficial uses in Famosa Slough most sensitive to and impacted by eutrophic conditions are: estuarine habitat (EST), marine habitat (MAR), migration of aquatic organisms (MIGR), rare, threatened or endangered species (RARE) spawning, reproduction, and/or early development (SPWN) and wildlife habitat (WILD). Other designated beneficial uses related to human uses include contact water recreation (REC-1), non-contact water recreation (REC-2), commercial and sport fishing (COMM) and shellfish harvesting (SHELL). Famosa Slough is a designated State Marine Conservation Area that restricts allowable activities. Due to restrictions on swimming and fishing in Famosa Slough, the REC-2 beneficial use is the most sensitive human use impacted by eutrophic conditions.

The Basin Plan contains WQOs developed to protect the most sensitive beneficial uses designated for a water body. The Basin Plan's WQO for biostimulatory substances is a narrative objective with numeric interpretations for nitrogen and phosphorus.

- i. Narrative WQO. The narrative WQO for biostimulatory substances for inland surface waters, enclosed bays and estuaries, and coastal lagoons is:

Inland surface waters, bays and estuaries and coastal lagoon waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses.

- ii. Numeric Interpretation of the WQO. The numeric interpretation of the WQO for biostimulatory substances for inland surface waters, enclosed bays and estuaries, and coastal lagoons is:

Concentrations of nitrogen and phosphorus, by themselves or in combination with other nutrients, shall be maintained at levels below those which stimulate algae and emergent plant growth.

Threshold phosphorus (P) concentrations shall not exceed 0.05 [milligrams per liter] mg/l in any stream at the point where it enters any standing body of water, nor 0.025 mg/l in any standing body of water. A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/l total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board.

Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used.

5 PROBLEM STATEMENT

Eutrophic conditions at Famosa Slough are most apparent by the presence of large floating mats of macroalgae. Eutrophication causes adverse ecological effects and creates a condition of public nuisance. Therefore, eutrophication results in an impairment of water quality and limits the ability of Famosa Slough to support the REC-1, REC-2, COMM, EST, WILD, RARE, MAR, MIGR, SPWN, and SHELL beneficial uses. As a result, the San Diego Water Board placed Famosa Slough on the 1990 CWA section 303(d) list of impaired water bodies. Subsequently, the San Diego and State Water Boards provided financial assistance to the City and stakeholders to restore wetland habitat, improve the Slough's hydrology, and treat dry and wet-weather runoff. Nonetheless, the impairment was confirmed during investigations conducted accordance with Investigation Order No. [R9-2006-0076](#).

The results of the eutrophic conditions are floating algae mats, depletion of the oxygen levels in the water by nighttime respiration and algal decay, shading of beneficial submerged aquatic vegetation, displacement of other aquatic plants, and smothering of benthic organisms. Low levels of oxygen can create hypoxic and anoxic conditions that can cause physical stress and mortality in aquatic organisms. These conditions result in negative impacts on the health of aquatic populations in Famosa Slough. Excessive algal growth also results in floating algal scum and algal mats that are aesthetically unpleasant and impair recreational beneficial uses.

6 TOTAL MAXIMUM DAILY LOADS and NUMERIC TARGETS

The draft TMDL technical report for Famosa Slough focuses on load reductions of total nitrogen and total phosphorus from the Famosa Slough watershed and from nutrient cycling within the slough itself. The loads identify the amount of nutrients Famosa Slough is able to assimilate and still support designated beneficial uses.

This draft TMDL analysis uses numeric targets to translate the narrative biostimulatory substance WQO to achieve and maintain a healthy ecosystem in Famosa Slough. The [Technical Approach to Develop Nutrient Numeric Endpoints for California Estuaries](#) (Sutula et al, 2007) shows that biological response indicators are better at evaluating beneficial use impairments than nutrient concentrations alone. Based on the draft TMDL technical report, two nutrient numeric endpoints that most apply to conditions in Famosa Slough are macroalgae biomass and dissolved oxygen concentrations. Eutrophic conditions in Famosa Slough are most apparent by the presence of floating mats of macroalgae, and can cause low dissolved oxygen levels to reach hypoxic or anoxic conditions that stress and cause mortality in aquatic organisms. Therefore, to interpret the biostimulatory substance WQO, numeric targets for macroalgae biomass and dissolved oxygen were chosen to evaluate impacts on key beneficial uses for estuarine, marine and recreational uses. These targets directly correlate to the health of the water body and its ecological response to nutrient enrichment.

Based on the draft TMDL technical report the stakeholders agreed on numeric targets for macroalgae biomass at 58 grams dry weight per meter squared and for dissolved oxygen using continuous data at an average daily minimum of 5.0 mg/L with an allowable exceedance 10 percent of the time. The modeling results suggest that these target levels are possible to meet when nutrient loads are reduced. Monitoring for the targets is key to tracking improvements in response to management actions performed by the City. Numeric water quality targets are interpretations of existing water quality standards. They are not water quality standards, and therefore, the formal rule making process such as the application of Water Code section 13241, does not apply (OCC, 2002).

7 SOURCE ANALYSIS

The draft TMDL technical report indicates that the most significant sources of nutrient loading into Famosa Slough are non-storm water discharges from the local watershed and nutrient cycling in Famosa Slough. The nutrients are defined as total nitrogen and total phosphorus that cause the eutrophic conditions. The surrounding areas are highly urbanized and several storm drains from the watershed area discharge directly into Famosa Slough. Based on land uses in the watershed the draft TMDL technical report indicates that the largest contributors of nutrients are from residential areas and open land uses. Landscape irrigation and other anthropogenic sources contribute to consistent year-round nutrient loads.

8 LINKAGE ANALYSIS

The linkage analysis describes the relationship between pollutant loading and the response of the water body to the loading. This information is used to calculate the water body's assimilative capacity and to calculate a reduction in source loading that will achieve the numeric targets. Tetra Tech, Inc. performed the linkage analysis using computer watershed and receiving water models selected from the USEPA TMDL Modeling Toolbox to simulate the physical processes in the watershed and in Famosa Slough. The Loading Simulation Program C++ (LSPC) simulated watershed hydrology and nutrient loading from source areas. This model established numeric targets and pollutant load reductions. The Environmental Fluid Dynamics Code (EFDC) simulated the complex hydrologic and pollutant transport relationships within Famosa Slough. The models considered physical domain, source contributions, critical conditions, pollutant constituents and existing monitoring data.

The linkage analysis, as summarized in the draft TMDL technical report, demonstrates that nutrients conveyed from the watershed via the City's storm water conveyance system to Famosa Slough can result in algal blooms and eutrophication in Famosa Slough. The modeling evaluated the effectiveness of different management scenarios on improving water quality in Famosa Slough.

9 MARGIN OF SAFETY

A margin of safety (MOS) is incorporated into the draft TMDL calculations to account for uncertainties in developing the relationship between pollutant discharges and water quality impacts. The MOS for Famosa Slough is implicit based on conservative modeling assumptions and use of a detailed modeling analysis to develop the draft TMDL.

10 SEASONAL VARIATIONS AND CRITICAL CONDITIONS

In the draft TMDL analysis, seasonality was taken into account by modeling complete water years to consider pollutant contributions for all flows throughout the year, rather than at a single critical flow. Model simulations accounted for variations in rainfall, evaporation, and associated impacts on runoff and transport of nutrient loads to Famosa Slough.

11 LOAD ALLOCATIONS AND REDUCTIONS

A reduction in nutrient loading is required to correct the water quality impairment in Famosa Slough. The two actions identified to reduce nutrient loads are a 37 percent reduction in year-round non-storm water discharges, and twice-a-year algae harvesting in the Slough. The draft load allocations for total nitrogen and total phosphorus are expressed for both the yearly and daily loads in Table 1 shown below. TMDL values are based on calculated loads that achieve numeric targets. Then draft waste load allocations (WLAs) were estimated for the point sources dischargers, the City of San Diego and Caltrans.

The modeling suggests that the necessary point source reductions to meet the draft TMDL targets can be done entirely within the City of San Diego's jurisdiction. Caltrans is responsible for storm water and non-storm water discharges from the State highway system. Interstate 8 runs along the northern border of Famosa Slough, and accounts for approximately 3 percent of the total local watershed area. Therefore, the WLA estimated for Caltrans is only 3 percent of the total allowable load. The Caltrans discharges are regulated by the State Water Board under Order No. 2012-0011-DWQ, as amended. Caltrans is required to properly manage storm and non-storm discharges from highways. Barring unusual circumstances, no additional actions by Caltrans are necessary at this time to meet the goals of the draft TMDL.

Table 1 . Draft TMDL for Net Annual Watershed Nutrient Loads to Famosa Slough

Input Location	Annual Net Total Nitrogen (kg/yr)	Annual Net Total Phosphorus (kg/yr)	Daily Net Total Nitrogen (kg/day)	Daily Net Total Phosphorus (kg/day)
TMDL	1,187.90	583.76	3.25	1.60
WLA (City of San Diego MS4)	1,152.26	566.25	3.16	1.55
WLA (Caltrans MS4)	35.64	17.51	0.10	0.05
LA	Not calculated due to minor impacts on eutrophic conditions			
MOS	Implicit	Implicit	Implicit	Implicit

The draft TMDL technical report indicates that nonpoint sources of nutrients are identified to include internal cycling, sediment flux and atmospheric deposition. These sources were not assigned load allocations, as they were considered part of the overall load from point sources. The San Diego River also was not assigned a load allocation due to its small contributions to nutrient loads. The modeling results indicate that a reduction in nutrient loads from the San Diego River is not necessary to meet the goals of the draft TMDL.

13 IMPLEMENTATION, MONITORING, AND COMPLIANCE

The source analyses identified non-storm water discharges from the local watershed and nutrient cycling in Famosa Slough as the most significant sources of nutrients in Famosa Slough.

The San Diego Water Board adopted the Regional MS4 Permit in May 2013. It was amended in February 2015 and again in November 2015. The City is a Copermittee regulated by the Regional MS4 Permit.

The requirements in the Regional MS4 Permit include effectively eliminating non-storm water discharges to the MS4, with a prohibition on discharges from over-irrigation, and development of a program to detect and eliminate illicit discharges (see implementation provisions under Provision II.E.2, *Illicit Discharge Detection and Elimination*).

In addition to investigating the nutrient impairment and investing resources to develop a draft TMDL technical report, the City is already engaged in efforts to improve water quality at Famosa Slough. The City continues to collaborate with its citizens to reduce irrigation runoff by providing rebates for landscape improvements that use less water with turf removal and native plant replacement. The City has increased code enforcement patrols in the Famosa Slough watershed to detect and eliminate illicit discharges. The City will continue to focus on attaining the numeric targets for macroalgae biomass and dissolved oxygen in Famosa Slough through the elimination of unauthorized non-storm water discharges to the MS4, and by harvesting algae up to two times per year. The City will monitor macroalgae biomass and dissolved oxygen in Famosa Slough to assess progress on improvements to water quality.

The provisions in the Regional MS4 Permit have requirements to develop and implement a Water Quality Improvement Plan for priority water bodies in each of the major watersheds in the San Diego Region. The Copermittees choose the priority pollutants and the priority water bodies that they will address through the watershed plan. The draft TMDL technical report indicates that the necessary nutrient load reductions to restore Famosa Slough can be accomplished with actions performed by the City. As a Copermittee, the City proposes to list the nutrient impairment in Famosa Slough as a high priority in its jurisdiction. The City will utilize future updates to the Water Quality Improvement Plan for the San Diego River as the regulatory tool to document the actions employed to reduce nutrient loads, report monitoring results, and track the progress of water quality restoration in Famosa Slough.

14 SCHEDULE

The City, under its obligations as a Copermittee to the Regional MS4 Permit, can take reasonable and appropriate actions to comply with the Regional MS4 Permit to address the impairment of Famosa Slough. Actions include but are not limited to those listed in Table 2 to attain the numeric targets and restore the beneficial uses of Famosa Slough by the end of 2027, with final reporting in January 2028.

Table 2. Expected Schedule.

Expected Schedule to Address the Eutrophic Impairment in Famosa Slough.		
Yr.	Activity	Month/Year
0	Properly implement an illicit discharge detection and elimination program in compliance with existing requirements of the Regional MS4 Permit to effectively prohibit non-storm water discharges into the MS4 system that discharge into Famosa Slough. Implementation includes illicit discharge detection and elimination, and the assessment of accomplishments / progress.	Ongoing
0	City prepares Jurisdictional Runoff Management Program (JRMP) Compliance Monitoring Plan and QAPP updates for Famosa Slough. City submits QAPP to San Diego Water Board for review.	Dec 2017
1	City modifies the JRMP to include water quality monitoring activities and weekly enforcement patrols specific to Famosa Slough. Modifications to the JRMP will also include the addition of this schedule and a statement committing the City to develop and implement Water Quality Improvement Plan strategies, Load Reduction Plans, and Implementation Plans (patrols and monitoring) for the Famosa Slough project.	Jan 2018
1	City initiates the preparation of the San Diego River Watershed Management Area (WMA) Water Quality Improvement Plan (WQIP) Goals, Strategies, Load Reduction Plans, Implementation Plans, and Schedules that align with the City’s Famosa Slough final draft TMDL technical report, the San Diego Water Board’s Famosa Slough staff report and the schedule in this attachment.	Jan 2018

Expected Schedule to Address the Eutrophic Impairment in Famosa Slough.		
Yr.	Activity	Month/Year
1	Begin compliance monitoring program for the Slough.	May 2018
1	Begin algae harvesting in response to excessive algal blooms.	May 2018
1	City submits for review to the San Diego Water Board, the WQIP goals, strategies, and schedules associated with Famosa Slough project for acceptance to the January 2019 WQIP update. Update materials will also be presented to San Diego River WMA Consultation Panel in July 2018.	July 2018
2	City incorporates WQIP goals, strategies, monitoring plan, QAPP, and schedules associated with Famosa Slough project into San Diego River WQIP Annual Report.	Jan 2019
2	San Diego Water Board accepts the WQIP update for Famosa Slough within 90 days of WQIP Annual Report submittal.	Apr 2019
3	City submits annual WQIP Report and annual Monitoring Report for the Slough demonstrating achievement of annual milestone(s) that complies with section B.3.c of the Regional MS4 Permit.	Jan 2020
4	City submits annual WQIP Report and annual Monitoring Report for the Slough demonstrating achievement of annual milestone(s) that complies with section B.3.c of the Regional MS4 Permit.	Jan 2021
5	City submits annual WQIP Report and annual Monitoring Report for the Slough demonstrating 40% attainment with required reduction in waste loads.	Jan 2022
6	City submits annual WQIP Report and annual Monitoring Report for the Slough demonstrating achievement of annual milestone(s) that complies with section B.3.c of the Regional MS4 Permit.	Jan 2023

Expected Schedule to Address the Eutrophic Impairment in Famosa Slough.		
Yr.	Activity	Month/Year
7	City submits annual WQIP Report and annual Monitoring Report for the Slough demonstrating achievement of annual milestone(s) that complies with section B.3.c of the Regional MS4 Permit.	Jan 2024
8	City submits annual WQIP Report and annual Monitoring Report for the Slough demonstrating achievement of annual milestone(s) that complies with section B.3.c of the Regional MS4 Permit.	Jan 2025
9	City submits annual WQIP Report and annual Monitoring Report for the Slough demonstrating 80% attainment with required reduction in waste loads.	Jan 2026
10	City submits annual WQIP Report and annual Monitoring Report for the Slough demonstrating achievement of annual milestone(s) that complies with section B.3.c of the Regional MS4 Permit.	Jan 2027
11	City submits annual WQIP Report and annual Monitoring Report for the Slough demonstrating 100% attainment with required reduction in waste loads.	Jan 2028

15 PUBLIC PARTICIPATION

The development of the draft TMDL technical report provided several opportunities for stakeholders and the public to receive information and provide oral comments to the San Diego Water Board, including:

- a. A multi-year process where meetings with stakeholders were held during the development of the draft TMDL technical report.
- b. A CEQA scoping meeting was held on February 1, 2016, where stakeholders and the public were provided the opportunity to give oral comments to the San Diego Water Board regarding potential environmental impacts that may occur with the implementation of a TMDL.
- c. A public workshop scheduled on December 13, 2017, where stakeholders and the public were provided the opportunity to review technical documents and provide oral comments to the San Diego Water Board about the project.

The Regional MS4 Permit requires that all updates to the Water Quality Improvement Plans must include a public participation process that will allow the public to review and comment on proposed updates. The public will have future opportunities to review and provide comments on Famosa Slough updates to the Water Quality Improvement Plan for the San Diego River.

16 REFERENCES

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