

**CENTRAL COAST REGIONAL WATER QUALITY CONTROL BOARD
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-7906**

RESOLUTION NO. R3-2018-0006

**AMENDING THE WATER QUALITY CONTROL PLAN FOR THE CENTRAL COASTAL
BASIN TO ADOPT TOTAL MAXIMUM DAILY LOADS FOR NITROGEN AND PHOSPHORUS
COMPOUNDS IN STREAMS OF THE FRANKLIN CREEK WATERSHED**

The Central Coast Regional Water Quality Control Board (Central Coast Water Board) finds:

1. The Central Coast Water Board adopted the Water Quality Control Plan for the Central Coastal Basin (Basin Plan) on March 14, 1975. The Basin Plan designates beneficial uses and water quality objectives, implementation programs for achieving water quality objectives addressing point source and nonpoint source discharges, prohibitions, and incorporates statewide plans and policies. The Basin Plan is periodically reviewed and revised. The Central Coast Water Board has determined that the Basin Plan requires further revision and amendment.
2. The Central Coast Water Board periodically revises and amends the Basin Plan. The Central Coast Water Board has determined the Basin Plan requires further revision and amendment to incorporate Total Maximum Daily Loads (TMDLs) and an implementation plan for nitrogen and phosphorus compounds in streams of the Franklin Creek watershed.
3. Pursuant to California Water Code section 106.3(a), it is the policy of the State of California that every human being has a right to safe, clean, affordable, and accessible water adequate for human consumption. California Water Code section 106.3(b) requires the Central Coast Water Board to consider how state actions impact the human right to water and creates a state policy that directs the Central Coast Water Board and other state agencies to explicitly consider the human right to water when revising, adopting, or establishing policies, regulations, and grant criteria when those policies, regulations, and grant criteria affect the human right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This order promotes that policy by establishing nitrate TMDLs for streams in the Franklin Creek watershed which are designated for protection of human health including municipal and domestic water supply.
4. The geographic scope of these TMDLs encompasses approximately 2,850 acres (4.5 square miles) in southeastern Santa Barbara County. Major tributaries to the main channel of Franklin Creek include the East Branch, West Branch, and High School Creek. The upper watershed is primarily National Forest Land (chaparral) and the creek descends through lower lands comprised of orchards (avocado) agricultural use (nurseries, greenhouses), and urban development. Franklin Creek drains through the 230-acre Carpinteria Salt Marsh, an important coastal wetland.
5. Franklin Creek is listed on California's Clean Water Act section 303(d) List (303(d) List) for water quality impairments due to nitrate. Due to the Clean Water Act section 303(d) listings, the Central Coast Water Board is required to adopt a TMDL and an associated implementation plan (40 CFR [Code of Federal Regulations]130.6(c)(1) and 130.7; California Water Code section 13242).

6. Available data indicate: (1) stream water quality violations of the Basin Plan's drinking water standard for nitrate; and (2) stream water quality violations of the Basin Plan's narrative general objective for biostimulatory substances in inland surface waters. In addition, some stream reaches are not meeting non-regulatory recommended guidelines for nitrate in agricultural supply water (AGR) for sensitive crop types, indicating that potential or future designated agricultural supply beneficial uses in these surface waters may be impacted detrimentally.
7. Available data indicate that discharges of nutrients (specifically, nitrogen and phosphorus compounds) are occurring at levels in surface waters which are impairing a wide range of beneficial uses, including impairments of municipal and domestic drinking water supply beneficial uses, impairments of aquatic habitat beneficial uses, impairments of groundwater recharge beneficial uses, and degradation locally of designated agricultural water supply beneficial uses (irrigation supply for sensitive crops).
8. The Central Coast Water Board's goal for establishing TMDLs for Franklin Creek is to rectify impairment due to excessive nitrogen and phosphorus compounds, thereby providing support for the designated beneficial uses of municipal and domestic water supply (MUN), cold and warm fresh water habitat (COLD and WARM), groundwater recharge (GWR), agricultural water supply (AGR), and to support water quality standards attainment with regard to the Basin Plan's water quality objective for biostimulatory substances.
9. The Central Coast Water Board proposes to amend the Basin Plan by inserting amendments into Chapter Four, Section 9 (Total Maximum Daily Loads).
10. On May 20, 2004, the State Water Resources Control Board (State Water Board) adopted the Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (Nonpoint Source Policy). These TMDLs are consistent with the Nonpoint Source Policy. The Nonpoint Source Policy requires the Regional Water Quality Control Boards to regulate all nonpoint sources of pollution using the administrative permitting authorities provided by the Porter-Cologne Water Quality Control Act (Porter-Cologne Act, Water Code Division 7). Consistent with the Nonpoint Source Policy and the Porter-Cologne Act, Regional Water Quality Control Boards regulate nonpoint source discharges with waste discharge requirements, waivers of waste discharge requirements, and/or basin plan prohibitions.
11. On May 20, 2004, the State Water Board adopted the Water Quality Control Policy for Developing California's Clean Water Act section 303(d) List (State Water Board Resolution No. 2004-0063), hereafter referred to as the California 303(d) Listing Policy. These TMDLs are consistent with the California 303(d) Listing Policy. The California 303(d) Listing Policy describes the process by which the State Water Board and the Regional Water Quality Control Boards will comply with the listing requirements of the federal Clean Water Act. The objective of the California 303(d) Listing Policy is to establish a standardized approach for developing California's Clean Water Act section 303(d) List and to provide guidance for interpreting data and information to make decisions regarding water quality standards attainment.
12. On June 16, 2005, the State Water Board adopted the Water Quality Control Policy for Addressing Impaired Waters: Regulatory Structure and Options (State Water Board Resolution 2005-0050), hereafter referred to as the Impaired Waters Policy. These TMDLs are consistent with the Impaired Waters Policy. The Impaired Waters Policy provides policy and procedures for adopting TMDLs and addressing impaired waters in California. The

Impaired Waters Policy states that the Regional Water Quality Control Boards have independent discretion, broad flexibility, numerous options, and some legal constraints that apply when determining how to address impaired waters.

13. The U.S. Environmental Protection Agency's (USEPA) published TMDL guidance (Guidance for Water Quality-Based Decisions: The TMDL Process – Chapter 1, Policies and Principles, USEPA 404/4-91-001, April 1991) explicitly states that implementation of TMDLs and water quality-based controls should not be delayed due to lack of information and uncertainties about pollution problems, particularly with respect to nonpoint sources. More information about the spatial extent and nature of water quality impairments can be collected during TMDL implementation. At this time, there is sufficient information to develop and implement TMDLs for nitrogen and phosphorus compounds in streams of the Franklin Creek watershed.
14. The elements of a TMDL are described in 40 CFR 130.2 and 130.7, section 303(d) of the Clean Water Act, and USEPA guidance documents. A TMDL is defined as “the sum of individual wasteload allocations for point sources and load allocations for nonpoint sources and natural background” (40 CFR 130.2). The Central Coast Water Board has determined that the TMDLs for nitrogen and phosphorus compounds in streams of the Franklin Creek watershed are set at levels necessary to attain and maintain the applicable numeric water quality objectives, taking into account seasonal variations and any lack of knowledge concerning the relationship between effluent limitations and water quality consistent with 40 CFR 130.7(c)(1). The regulations in 40 CFR 130.7 also state that TMDLs shall take into account critical conditions for stream flow, loading, and water quality parameters. TMDLs are often expressed as a mass load of the pollutant but can be expressed as a unit of concentration if appropriate (40 CFR 130.2(i)). Expressing these TMDLs as units of concentration is appropriate because an existing concentration-based water quality objective is used as the basis for the TMDL numeric target and attaining that concentration-based water quality objective will result in protection of the beneficial uses.
15. Upon establishment of TMDLs by the state or USEPA, the state is required to incorporate the TMDLs, along with appropriate implementation measures, into the State Water Quality Management Plan (40 CFR 130.6(c)(1) and 130.7 and California Water Code sections 13050(j) and 13242). The Basin Plan and applicable statewide plans serve as the State Water Quality Management Plan governing the watersheds under the jurisdiction of the Central Coast Water Board.
16. The TMDLs and implementation plans are based on sound scientific knowledge, methods, and practices in accordance with Health and Safety Code section 57004. Health and Safety Code section 57004 requires external scientific peer review for certain water quality control policies. Scientific portions of these TMDLs are drawn exclusively from the TMDLs for Nitrogen Compounds and Orthophosphate in the lower Salinas River and Reclamation Canal Basin, and the Moro Cojo Slough Subwatershed (Resolution No. R3-2013-0008), which received independent scientific peer review in April 2012. As a result, the scientific methodologies used in development of these TMDLs have already undergone external, scientific peer review. Consequently, the Central Coast Water Board has fulfilled the requirements of Health and Safety Code section 57004, and the proposed amendment does not require further peer review.
17. Central Coast Water Board staff will conduct a review of implementation activities when monitoring and reporting data are submitted as required by the 2017 Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (Agricultural Order) and existing or future National Pollutant Discharge Elimination System (NPDES) stormwater

permits, or when other monitoring data and/or reporting data are submitted outside the requirements of existing permits and orders. Central Coast Water Board staff will pursue modification of Agricultural Order conditions, NPDES stormwater permit conditions, or other regulatory means, as necessary, to address remaining impairments resulting from nitrogen and phosphorus compounds during the TMDL implementation phase.

18. Central Coast Water Board staff implemented a process to inform interested persons about the TMDLs. Central Coast Water Board staff's efforts to inform the public and solicit comment included public meetings with interested persons and a public notice and written comment period. Public notice of the proposed Basin Plan amendment provided the public a 45-day public comment period preceding the Central Coast Water Board hearing. Notice of public hearing was given by advertising in a newspaper of general circulation within the region and by emailing a copy of the notice to all persons requesting such notice and applicable government agencies. Relevant documents and notices were also made available on the Central Coast Water Board website. Central Coast Water Board staff responded to oral and written comments received from the public. All public comments were considered.
19. Adoption of these TMDLs and Basin Plan amendment will not result in any degradation of water quality; in fact, they are designed to improve water quality. As such, these TMDLs and Basin Plan amendment comply with all requirements of both state and federal anti-degradation requirements (State Board Resolution 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California" and 40 CFR 131.12).
20. The Central Coast Water Board recognizes that certain limited resource farmers (as defined by the U.S. Department of Agriculture) may have difficulty achieving compliance with these TMDLs. The Central Coast Water Board will prioritize assistance for these farmers, including, but not limited to, technical assistance, grant opportunities, and necessary flexibility to achieve compliance (e.g., adjusted monitoring, reporting, or time schedules).
21. Pursuant to Public Resources Code section 21080.5, the Resources Agency has approved the Regional Water Boards' basin planning process as a "certified regulatory program" that adequately satisfies the California Environmental Quality Act (CEQA) (Public Resources Code, section 21000 et seq.) requirements for preparing environmental documents (14 Cal. Code Regs. §15251(g); 23 Cal. Code Regs. § 3782). Central Coast Water Board staff has prepared "substitute environmental documents" for this project that contain the required environmental documentation as set forth in the State Water Board's CEQA regulations (23 Cal. Code Regs. § 3777). The substitute environmental documents include the TMDL staff report and several of its attachments, including: (1) this Resolution and the Basin Plan amendment language (Attachment 1 of the staff report); (2) *Total Maximum Daily Loads Report for Nitrogen and Phosphate Compounds in Streams of the Franklin Creek Watershed, Santa Barbara County, California* (Attachment 2 of the staff report); (3) the CEQA checklist and analysis (Attachment 3 of the staff report); and (4) the comments and responses to comments (Attachment 5 of the staff report). The staff report also includes the Notice of Public Hearing/Notice of Filing (Attachment 4 of the staff report). The project itself is the establishment of TMDLs for nitrogen and phosphorus compounds in streams of the Franklin Creek watershed. The Central Coast Water Board exercises discretion in assigning wasteload allocations and load allocations, determining the program of implementation, and setting various milestones in achieving the water quality standards. The CEQA checklist and other portions of the substitute environmental documents contain significant analysis and numerous findings related to impacts and mitigation measures.

22. A CEQA scoping meeting was conducted on June 10, 2016, in the City of Carpinteria. A notice of the CEQA scoping meeting was sent to interested persons prior to the scoping meeting on May 16, 2015. A second CEQA scoping meeting was conducted on September 20, 2017, in the City of Carpinteria. A notice of this CEQA scoping meeting was sent to interested persons on August 21, 2017. The notices included the background of the project, the project purpose, a meeting schedule, and directions for obtaining more detailed information through the Central Coast Water Board website. The notice and project summary were available on the website or by requesting hard copies via telephone.
23. Public Resources Code section 21159 provides that an agency shall perform, at the time of the adoption of a rule or regulation requiring the installation of pollution control equipment or a performance standard or treatment requirement, an environmental analysis of the reasonably foreseeable methods of compliance, and an analysis of the reasonably foreseeable environmental impacts of the methods of compliance, an analysis of reasonably foreseeable mitigation measures to lessen the adverse environmental impacts, and an analysis of reasonably foreseeable alternative means of compliance with the rule or regulation that would have less significant adverse impacts. Section 21159(c) requires that the environmental analysis take into account a reasonable range of environmental, economic, and technical factors; population and geographic areas; and specific sites. The staff report prepared for this Basin Plan amendment, in particular the CEQA checklist and analysis (Attachment 3 of the staff report), provides the environmental analysis required by Public Resources Code section 21159 and is hereby incorporated as findings in this Resolution.
24. In preparing the substitute environmental documents, the Central Coast Water Board has considered the requirements of Public Resources Code section 21159 and California Code of Regulations, title 14, section 15187, and intends those documents to serve as a Tier 1 environmental review. This analysis is not intended to be an exhaustive analysis of every conceivable impact, but an analysis of the reasonably foreseeable consequences of the adoption of this regulation, from a programmatic perspective. Compliance obligations will be undertaken directly by public agencies that may have their own obligations under CEQA. Project level impacts may need to be considered in any subsequent environmental analysis performed by other public agencies, pursuant to Public Resources Code section 21159.2. To the extent applicable, this Tier 1 substitute environmental document may be used to satisfy subsequent CEQA obligations of those agencies.
25. Consistent with the Water Board's substantive obligations under CEQA, the substitute environmental documents do not engage in speculation or conjecture, and only consider the reasonably foreseeable environmental impacts, including those relating to the methods of compliance, reasonably foreseeable feasible mitigation measures to reduce those impacts, and the reasonably foreseeable alternative means of compliance, that would avoid or reduce the identified impacts.
26. The staff report, the draft Basin Plan amendment, and the Environmental Checklist and associated analysis provide the necessary information pursuant to state law to conclude that the proposed TMDLs, Implementation Plan, and the associated reasonably foreseeable methods of compliance will not have a significant adverse effect on the environment with the exception of potentially significant impacts associated with Biological Resources CEQA Checklist Category IV(a), potentially significant impacts to habitat of fish or wildlife species associated with Mandatory Findings of Significance CEQA Checklist Category XVIII.(a), and potential adverse impacts resulting from construction noise associated with TMDL implementation activities CEQA Checklist Category XIII. This determination is based on best

available information in an effort to fully inform the interested public and the decision makers of potential environmental impacts. "Significant effects" on the environment are defined as "a substantial, or potentially substantial, adverse change within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance" (14 Cal. Code Regs. § 1538). Wide-scale water conservation measures and changing water management practices potentially could result in lower flows to surface waters resulting in potentially substantial adverse changes to aquatic habitat. Reduction in polluted runoff may offset potentially substantial adverse impacts resulting from potential reduced flows. In addition, reduction in tailwater discharge could result in increased groundwater levels that would result in more baseflow to surface waterbodies. Further, maintaining surface flows and circulation may in fact be part of a viable strategy to reduce biostimulatory impacts, since biostimulatory impacts are only partly attributable to elevated nutrients; biostimulatory impacts may be mitigated by increased flow, aeration, and shading of the waterbody. Potential mitigation measures to prevent reduced flows or to reduce the impact of reduced flows include phasing in management practices that could result in reduced flows; and use of riparian buffers and other vegetated treatment systems that will effectively treat the water to remove pollutants, but not necessarily reduce flows. Given the uncertainty associated with evaluating the available information, it is possible that any potentially substantial adverse changes on aquatic habitat associated with the Basin Plan amendment will be less than significant. When the entities and responsible parties responsible for implementing these TMDLs determine how they will proceed, the agencies responsible for those parts of the project can and should incorporate such alternatives and mitigation into any subsequent projects or project approvals. Feasible alternatives and mitigation measures are described in more detail in the substitute environmental documents (14 Cal. Code Regs. § 15091(a)(2)). Legal considerations may make some of the mitigation measures that could be implemented infeasible.

27. Pursuant to CEQA Guidelines section 15093, the Central Coast Water Board hereby finds that the project's benefits override and outweigh its potential significant adverse impacts, for the reasons more fully set forth in the staff report and attachments thereto. Specific environmental benefits justify the adoption of these TMDLs despite the project's potential significant adverse short-term environmental impacts. The Central Coast Water Board has the authority and responsibility to regulate discharges of waste associated with the sources of pollution causing impairment to water quality. Many of those discharges have caused significant widespread degradation and/or pollution of waters of the state as described in the *Total Maximum Daily Loads Report for Nitrogen and Phosphorus Compounds in Streams of the Franklin Creek Watershed, Santa Barbara County, California* and associated reference materials. These TMDLs would result in actions to restore the quality of the waters of the state and protect the beneficial uses, including aquatic habitat. While some impacts could occur from the implementation of management practices to comply with the TMDLs, the benefits, which include contributing to the present and future restoration of beneficial water uses, and reducing or eliminating pollution, nuisance and contamination, warrant approval of the TMDLs, despite each and every unavoidable impact.
28. From a program-level perspective, incorporation of the alternatives and mitigation measures outlined in the substitute environmental documents will reduce potential impacts to no impact, or keep the impact at less-than-significant levels.
29. The CEQA checklist and analysis (Attachment 3 of the staff report) identifies mitigation approaches that should be considered at the project level.

30. The Central Coast Water Board will request that the State Water Board approve the Basin Plan amendments incorporating TMDLs for nitrogen and phosphorus compounds in streams of the Franklin Creek watershed. The TMDLs and implementation plan will become effective upon approval by the California Office of Administrative Law. The TMDLs must also be approved by USEPA.
31. The Basin Plan amendment may have an effect on fish and wildlife. The Central Coast Water Board will, therefore, forward fee payments to the Department of Fish and Wildlife under the California Fish and Game Code section 711.4.
32. The proposed Basin Plan amendment meets the "Necessity" standard of the Administrative Procedures Act, Government Code, section 11353, subdivision (b). As specified in Finding 14, federal regulations require that TMDLs be incorporated into the Water Quality Management Plan. The Central Coast Water Board's Basin Plan is the Central Coast Water Board's component of the Water Quality Management Plan, and the Basin Plan is how the Central Coast Water Board takes quasi-legislative planning actions. Moreover, these TMDLs are a program of implementation for existing water quality objectives, and are, therefore, appropriately a component of the Basin Plan under the California Water Code, section 13242. The necessity of developing TMDLs is established in the TMDL staff report, the Clean Water Act section 303(d) list, and the data contained in the administrative record documenting the nitrogen and phosphorus compound impairments in streams of the Franklin Creek watershed.
33. Consistent with Water Code section 13141, the Basin Plan amendment includes an estimate of the total cost of implementation of the agricultural related portions of these TMDLs and identifies potential sources of financing.
34. On March 22-23, 2018, in Santa Barbara, California, the Central Coast Water Board held a public hearing and heard and considered all public comments and evidence in the record.

THEREFORE, be it resolved that:

1. Pursuant to sections 13240, 13242, 13243, and 13244 of the California Water Code, the Central Coast Water Board, after considering the entire record, including oral testimony at the hearing, hereby adopts the Basin Plan amendment in Attachment A to Resolution No. R3-2018-0006.
2. The Central Coast Water Board Executive Officer is directed to forward copies of the Basin Plan amendment to the State Water Board in accordance with the requirements of section 13245 of the California Water Code.
3. The Central Coast Water Board requests that the State Water Board approve the Basin Plan amendment in accordance with the requirements of sections 13245 and 13246 of the California Water Code and forward them to the California Office of Administrative Law and the USEPA for approval.
4. The Executive Officer is authorized to sign a Certificate of Fee Exemption or transmit payment of the applicable fee as may be required to the Resources Agency.
5. If, during the approval process, Central Coast Water Board staff, State Water Board staff, the State Water Board, or the California Office of Administrative Law determines that minor, non-substantive corrections to the language of the Basin Plan amendment are needed for clarity

or consistency, the Executive Officer or designee may make such changes, and shall inform the Central Coast Water Board of any such changes.

6. The environmental documents prepared by the Central Coast Water Board staff pursuant to Public Resources Code 21080.5 are hereby certified.

I, John M. Robertson, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of a resolution adopted by the Central Coast Regional Water Quality Control Board on March 22-23, 2018.

John M. Robertson
Executive Officer

Attachment: Attachment A to Resolution No. R3-2018-0006: Amendment to the Water Quality Control Plan for the Central Coastal Basin to Incorporate Total Maximum Daily Loads for Nitrogen and Phosphorus Compounds in Streams of the Franklin Creek Watershed

**California Environmental Protection Agency
Central Coast Regional Water Quality Control Board**

**Basin Plan Amendment
Attachment A to Resolution No. R3-2018-0006**

Amendment to the Water Quality Control Plan for the Central Coastal Basin
to Incorporate Total Maximum Daily Loads for Nitrogen and Phosphorus
Compounds in Streams of the Franklin Creek Watershed



ATTACHMENT A TO RESOLUTION NO. R3-2018-0006

Revise the September 27, 2017 Basin Plan as follows:

AMENDMENT TO THE WATER QUALITY CONTROL PLAN FOR THE CENTRAL COASTAL BASIN TO INCORPORATE TOTAL MAXIMUM DAILY LOADS FOR NITROGEN AND PHOSPHORUS COMPOUNDS IN STREAMS OF THE FRANKLIN CREEK WATERSHED

Add the following to Chapter 4.9.20:

4.9.20 TOTAL MAXIMUM DAILY LOADS FOR NITROGEN AND PHOSPHORUS COMPOUNDS IN STREAMS OF THE FRANKLIN CREEK WATERSHED

The Regional Water Quality Control Board adopted these TMDLs on March 22-23, 2018. These TMDLs were approved by:

The State Water Resources Control Board on: _____

The California Office of Administrative Law on: _____

The U.S. Environmental Protection Agency on: _____

Problem Statement

The discharge of nitrogen and phosphorus compounds are occurring in surface waters at levels which are impairing a spectrum of beneficial uses and, therefore, constitute a serious water quality problem. The municipal and domestic drinking water supply (MUN) beneficial use, groundwater recharge (GWR) beneficial use, and the range of aquatic habitat beneficial uses are not protected. The pollutants addressed in these TMDLs are nitrate, total nitrogen, and total phosphorus.

The TMDLs protect and restore the MUN and GWR beneficial uses, as well as several aquatic habitat beneficial uses that are currently being degraded by violations of the biostimulatory substances objective. The aquatic habitat beneficial uses currently being degraded include the following: wildlife habitat (WILD), cold fresh water habitat (COLD), warm fresh water habitat (WARM), migration of aquatic organisms (MIGR), spawning, reproduction, and/or early development (SPWN), preservation of biological habitats of special significance (BIOL), and rare, threatened, or endangered species (RARE). In addition, current or potential future beneficial uses of the agricultural water supply beneficial use (AGR) are not being supported. Nitrate can create problems not only for water supplies and aquatic habitat, but also potentially for nitrogen sensitive crops (grapes, avocado, citrus) by detrimentally impacting crop yield or quality.

The following impairments are addressed with these TMDLs:

- Franklin Creek: nitrate, nutrients (biostimulatory substances objective)

Numeric Targets

Numeric targets are water quality thresholds developed and used to ascertain when and where water quality objectives are achieved, and hence, when beneficial uses are protected.

Target for Nitrate (MUN and GWR standards)

To support MUN and GWR beneficial uses, the nitrate numeric target is 10 milligrams per liter (mg/L) as nitrogen. This numeric target is the same as the Basin Plan's numeric nitrate water quality objective protective of drinking water beneficial uses and groundwater recharge beneficial uses.

Targets for Biostimulatory Substances (total nitrogen and total phosphorus)

The Basin Plan contains the following narrative water quality objectives for biostimulatory substances:

“Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.”

To implement this narrative objective, staff developed scientifically peer reviewed numeric targets, based on established methodologies and approaches. The numeric targets for biostimulatory substances are presented in Table 4.9.20-1.

Table 4.9.20-1. Numeric targets for biostimulatory substances.

Waterbody	Total Nitrogen (mg/L)	Total Phosphorus (mg/L)
Franklin Creek	1.1 Maximum Dry Season Samples (May 1 – October 31)	0.075 Maximum Dry Season Samples (May 1 – October 31) ^t
	8 Maximum Wet Season Samples (November 1 - April 30)	0.3 Maximum Wet Season Samples (November 1 - April 30)

Targets for Nutrient-Response Indicators (dissolved oxygen, chlorophyll a, and microcystins)

Dissolved oxygen, chlorophyll a, and microcystin numeric targets are identified to assess biostimulatory conditions within Franklin Creek and to provide primary indicator metrics to assess biological responses to future nutrient reductions.

The dissolved oxygen numeric target for Franklin Creek is the same as the Basin Plan numeric water quality objective which states that dissolved oxygen concentrations shall not be reduced below 7.0 mg/L at any time.

Another dissolved oxygen numeric target for Franklin Creek is the same as the Basin Plan numeric water quality objective for all inland surface waters, enclosed bays and estuaries which states that median dissolved oxygen saturation should not fall below 85% saturation as a result of controllable water quality conditions.

To assess biostimulatory conditions and dissolved oxygen imbalances, the numeric water quality target indicative of excessive dissolved oxygen saturation is 13 mg/L (i.e., water column dissolved oxygen concentrations should not to exceed 13 mg/L).

For concentrations of chlorophyll a in Franklin Creek, the numeric water quality target for chlorophyll a is not to exceed 15 micrograms per liter (µg/L) in the water column.

For concentrations of microcystins in Franklin Creek, the numeric water quality target for microcystins is 0.8 micrograms per liter (µg/L) and includes microcystin congeners LA, LR, RR, and YR.

Table 4.9.20-2. Numeric targets for nutrient response indicators.

Waterbody	Dissolved oxygen concentration (mg/L)	Dissolved oxygen saturation (%)	Dissolved oxygen super-saturation (mg/L)	Chlorophyll a (µg/L)	Microcystins (µg/L) ¹
Franklin Creek	7.0 or greater	Median of 85 or greater	13 Not to exceed	15 Not to exceed	0.8 Not to exceed

¹ Includes microcystin congeners LA, LR, RR, and YR.

Source Analysis

Discharges of nitrogen and phosphorus compounds originating from irrigated agriculture, municipal NPDES-permitted stormwater system discharges, industrial and construction NPDES-permitted stormwater sources, and natural sources are contributing loads to receiving waters. Irrigated agriculture is the largest source of controllable water column nutrient loads in the Franklin Creek watershed and this source category is not currently meeting its proposed load allocation. Municipal NPDES-permitted stormwater sources are a relatively minor source of nitrogen and phosphorus compounds, but can be locally significant. Sources associated with industrial and construction NPDES-permitted facilities are currently meeting proposed load allocations.

TMDLs

The following TMDLs will result in attainment of water quality standards and will rectify impairments described in the Problem Statement.

The nitrate TMDL for all streams of Franklin Creek required to support MUN beneficial uses is:

- Nitrate concentration shall not exceed 10 mg/L as nitrogen in receiving waters.

The total nitrogen and total phosphorus TMDLs for all reaches of Franklin Creek are:

- For dry season (May 1 to October 31): Total nitrogen concentration shall not exceed 1.1 mg/L in receiving waters; total phosphorus concentration shall not exceed 0.075 mg/L in receiving waters, and
- For wet season (November 1 to April 30): Nitrate concentration shall not exceed 8.0 mg/L as nitrogen in receiving waters; total phosphorus concentration shall not exceed 0.3 mg/L in receiving waters.

The TMDLs are considered achieved when water quality conditions meet all regulatory and policy requirements necessary for removing the impaired waters from the Clean Water Act section 303(d) List of impaired waters.

Final Allocations and Interim Allocations

Owners and operators of irrigated lands, municipal NPDES-permitted stormwater entities, industrial and construction NPDES-permitted stormwater sources, and natural sources, are assigned nitrate, total nitrogen, and total phosphate allocations equal to the TMDL and numeric targets.

The final allocations to responsible parties are shown in Table 4.9.20-3. The final allocations are equal to the TMDLs and should be achieved 25-years after the TMDL effective date. Unlike the load-

based TMDL method, the concentration-based allocations do not add up to the TMDL because concentrations of individual pollution sources are not additive.

Recognizing that achievement of the more stringent final dry season biostimulatory allocations embedded in Table 4.9.20-3 may require a significant amount of time to achieve, interim allocations are identified. Interim allocations will be used as benchmarks in assessing progress towards the final allocations. Interim allocations are shown in Table 4.9.20-4.

Controllable Water Quality Conditions

In accordance with the Basin Plan, controllable water quality shall be managed to conform or to achieve the water quality objectives and load allocations contained in these TMDLs. The Basin Plan defines controllable water quality conditions as follows: *“Controllable water quality conditions are those actions or circumstances resulting from man's activities that may influence the quality of the waters of the State and that may be reasonably controlled.”* – Basin Plan Chapter 3, Water Quality Objectives, page 29.

Compliance with Anti-degradation Requirements

State and federal anti-degradation policies require, in part, that where surface waters are of higher quality than necessary to protect beneficial uses, the high quality of those waters must be maintained unless otherwise provided by the policies. The federal anti-degradation policy, 40 CFR 131.12(a), states in part, *“Where the quality of waters exceed levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the State finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the State’s continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located...”*

Compliance with anti-degradation requirements may be determined on the basis of trends in declining water quality in applicable waterbodies, consistent with the methodologies and criteria provided in section 3.10 of the California 303(d) Listing Policy (adopted, September 20, 2004, SWRCB Resolution No. 2004-0063). Section 3.10 of the California 303(d) Listing Policy explicitly addresses the anti-degradation component of water quality standards as defined in 40 CFR 130.2(j), and provides for identifying trends of declining water quality as a metric for assessing compliance with anti-degradation requirements.

Section 3.10 of the California 303(d) Listing Policy states that pollutant-specific water quality objectives need not be exceeded to be considered non-compliant with anti-degradation requirements: *“if the water segment exhibits concentrations of pollutants or water body conditions for any listing factor that shows a trend of declining water quality standards attainment.”*

Practically speaking, this means that, for example, stream reaches or waterbodies that have a concentration-based TMDL allocation of 10 mg/L nitrate as nitrogen, and if current water quality or future water quality assessments in the stream reach indicates nitrate as nitrogen is well under 10 mg/L, the allocation does not give license for controllable nitrogen sources to degrade the water resource up to the maximum allocation (10 mg/L nitrate as nitrogen).

Table 4.9.20-3. Final allocations and responsible parties.

FINAL WASTELOAD ALLOCATIONS (WLAs) ^{A,B}				
Waterbody ^C	Party Responsible for Allocation & NPDES/WDR number	Receiving Water Nitrate as N WLA (mg/L)	Receiving Water Total Nitrogen as N WLA (mg/L)	Receiving Water Total Phosphorus as P WLA (mg/L)
Franklin Creek	City of Carpinteria (Stormdrain discharges to MS4s) Stormwater Permit NPDES No. CAS000004	10 Year-round	1.1 Dry season (May 1 – October 31)	0.075 Dry season (May 1 – October 31)
	County of Santa Barbara (Stormdrain discharges to MS4s) Stormwater General Permit NPDES No. CAS000004		8 Wet season (November 1 - April 30)	0.3 Wet season (November 1 - April 30)
	Industrial stormwater general permit (stormdrain discharges from industrial facilities) NPDES No. CAS000001			
	Construction stormwater general permit (stormdrain discharges from construction operations) NPDES No. CAS000002			
FINAL LOAD ALLOCATIONS (LAs) ^{A,B}				
Waterbody ^C	Party Responsible for Allocation (Source)	Receiving Water Nitrate as N LA (mg/L)	Receiving Water Total Nitrogen as N LA (mg/L)	Receiving Water Total Phosphorus as P LA (mg/L)
Franklin Creek	Owners/operators of irrigated agricultural lands (Discharges from irrigated lands)	10 Year-round	1.1 Dry season (May 1 – October 31)	0.075 Dry season (May 1 – October 31)
	No responsible party (Natural sources)		8 Wet season (November 1 - April 30)	0.3 Wet season (November 1 - April 30)

^A Federal and state anti-degradation requirements apply to all wasteload and load allocations.

^B Achievement of final wasteload and load allocations to be determined on the basis of the number of measured exceedances and/or other criteria set forth in Section 4 of the *Water Quality Control Policy for Developing California's Clean Water Act section 303(d) List*, September 2004, amended February 2015 (Listing Policy).

^C Waterbody name includes all reaches of named waterbody and waterbodies that are tributary to named waterbody.

The parties responsible for the allocation to controllable sources are not responsible for the allocation to natural sources.

Table 4.9.20-4. Interim Allocations.

INTERIM WASTELOAD ALLOCATIONS (WLAs)			
Waterbody	Party Responsible for Achieving Wasteload Allocation (Source)	First Interim WLA	Second Interim WLA
Franklin Creek	City of Carpinteria (Stormdrain discharges to MS4s) Stormwater General Permit NPDES No. CAS000004	10 years after effective date of the TMDLs Achieve MUN standard-based allocations: 10 mg/L Nitrate as Nitrogen	15 years after effective date of the TMDLs
	County of Santa Barbara (Stormdrain discharges to MS4s) Stormwater General Permit NPDES No. CAS000004		Achieve Wet Season (Nov. 1 to Apr. 30) Biostimulatory target-based TMDL allocations:
	Industrial stormwater general permit (stormdrain discharges from industrial facilities) NPDES No. CAS000001		8 mg/L Total Nitrogen
	Construction stormwater general permit (stormdrain discharges from construction operations) NPDES No. CAS000002		0.3 mg/L Total Phosphorus
INTERIM LOAD ALLOCATIONS (LAs)			
Waterbody	Party Responsible for Achieving Load Allocation (Source)	First Interim LA	Second Interim LA
Franklin Creek	Owners/operators of irrigated agricultural lands (Discharges from irrigated lands)	10 years after effective date of the TMDLs Achieve MUN standard-based allocations: 10 mg/L Nitrate as Nitrogen	15 years after effective date of the TMDLs Achieve Wet Season (Nov. 1 to Apr. 30) Biostimulatory target-based TMDL allocations: 8 mg/L Total Nitrogen 0.3 mg/L Total Phosphorus

Margin of Safety

A margin of safety is incorporated implicitly in the TMDLs through conservative model assumptions and statistical analysis. In addition, an explicit margin of safety is incorporated by reserving 20% of the load, calculated on a concentration basis, from wet season allocations.

Implementation

Discharges from Irrigated Agricultural Lands

Owners and operators of irrigated agricultural land must comply with the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (Order R3-2017-0002; the Agricultural Order), or their renewals or replacements, to meet load allocations and achieve the TMDLs. The requirements in these orders, and their renewals or replacements in the future, will implement the TMDLs and rectify the impairments addressed in the TMDLs.

Current requirements in the Agricultural Order that will achieve the load allocations include:

- A. Implement, and update as necessary, management practices to reduce nutrient loading.
- B. Maintain existing, naturally occurring riparian vegetative cover in aquatic habitat areas.
- C. Develop/update and implement Farm Plans.
- D. Properly destroy abandoned groundwater wells.
- E. Develop and initiate implementation of an Irrigation and Nutrient Management Plan (INMP) or alternative certified by a Professional Soil Scientist, Professional Agronomist, or Crop Advisor certified by the American Society of Agronomy, or similarly qualified professional.

The current Agricultural Order provides the requirements necessary to implement this TMDL. Therefore, no new requirements are proposed as part of this TMDL.

Monitoring

Owners and operators of irrigated agricultural lands must perform monitoring and reporting in accordance with the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands, Monitoring and Reporting Program Orders R3-2017-0002-01, R3-2017-0002-02, and R3-2017-0002-03, as applicable, or their renewals or replacements.

Determining Progress Towards and Attainment of Load Allocations

Load allocations will be achieved through a combination of implementation of management practices and strategies to reduce nitrogen and phosphorus compound loading, and water quality monitoring. Flexibility to allow owners/operators of irrigated lands to demonstrate progress towards and attainment of load allocations is a consideration. Additionally, staff is aware that not all implementing parties are necessarily contributing to or causing a surface water impairment. However, it is important to recognize that impacting shallow groundwater with nutrient pollution may also impact surface water quality via baseflow loading contributions to the surface waterbodies.

To allow for flexibility, Central Coast Water Board staff will assess progress towards and attainment of load allocations using one or a combination of the following:

1. Owners/operators of irrigated lands may show progress towards attaining load allocations by implementing management practices that are capable of achieving interim and final load allocations identified in this TMDL;
2. Demonstrating quantifiable receiving water mass load reductions;
3. Attaining the nutrient load allocations in the receiving water;
4. Attaining receiving water TMDL numeric targets for nutrient-response indicators (i.e., dissolved oxygen water quality objectives, chlorophyll *a* targets and microcystin targets) and mitigation of downstream nutrient impacts to receiving waterbodies may constitute a demonstration of attainment of the nitrate, nitrogen and phosphorus-based seasonal biostimulatory load allocations. Note that implementing parties are strongly encouraged to maximize overhead riparian canopy, where and if appropriate, using riparian vegetation, because doing so could result in achieving nutrient-response indicator targets before allocations are achieved;

5. Owners/operators of irrigated lands may provide sufficient evidence to demonstrate that they are and will continue to attain the load allocations; such evidence could include documentation submitted by the owner/operator to the Executive Officer that the owner/operator is not causing waste to be discharged to impaired waterbodies resulting or contributing to violations of the load allocations.

Storm Drain Discharges to Municipal Separate Storm Sewer Systems

The Central Coast Water Board will address nitrogen and phosphate compounds discharged from municipal separate storm sewer systems (MS4s) by regulating the MS4 entities under the provisions of the State Water Resource Control Board's General Permit for the Discharges of Storm Water from Small Municipal Separate Storm Sewer Systems (General Permit, Water Quality Order No. 2013-0001-DWA, NPDES CAS000004), or subsequent General Permits. To address the MS4 wasteload allocations, the Central Coast Water Board will require MS4 enrollees that discharge to surface waterbodies impaired by excess nutrients or by biostimulation to address these impairments by developing and implementing a Wasteload Allocation Attainment Program.

The Central Coast Water Board will require MS4 entities to develop and submit for Executive Officer approval a Wasteload Allocation Attainment Program consistent with the requirements of the General Permit, or with any subsequent General Permits. The Wasteload Allocation Attainment Program shall include descriptions of the actions that will be taken by the MS4 entity to attain the TMDL wasteload allocations.

MS4 Stormwater Monitoring

The MS4s are required to develop and submit monitoring programs as part of their WAAP. The goals of the monitoring programs are described in the requirements of the WAAP.

The MS4s must prepare a detailed description, including a schedule, of a monitoring program the MS4 will implement to assess discharge and receiving water quality, BMP effectiveness, and progress towards any interim targets and ultimate attainment of the MS4s' wasteload allocations. The monitoring program shall be designed to validate BMP implementation efforts and quantitatively demonstrate attainment of interim and final wasteload allocations. The Central Coast Water Board may approve participation in statewide or regional monitoring programs as meeting all, or a portion of monitoring requirements.

Staff encourages the implementing parties to develop and submit creative and meaningful monitoring programs. Monitoring strategies can use a phased approach, for example, whereby outfall or receiving water monitoring is phased in after best management practices have been implemented and assessed for effectiveness. Pilot projects where best management practices are implemented in well-defined areas covering a fraction of the MS4 that facilitate accurate assessment of how well the best management practices control pollution sources are acceptable, with the intent of successful practices then being implemented in other or larger parts of the MS4.

Determining Progress Towards and Attainment of Load Allocations

Wasteload allocations will be achieved through a combination of implementation of management practices and strategies to reduce nitrogen and phosphorus compound loading, and water quality monitoring.

To allow for flexibility, Central Coast Water Board staff will assess progress towards and attainment of wasteload allocations using one or a combination of the following:

1. Demonstrate progress toward and attainment of wasteload allocations by measuring concentrations in stormdrain outfalls;
2. Demonstrate progress toward and attainment of wasteload allocations by measuring load reductions on mass basis at stormdrain outfalls;

3. Attaining the wasteload allocations in the receiving water;
4. Attaining receiving water TMDL numeric targets for nutrient-response indicators (i.e., dissolved oxygen water quality objectives, chlorophyll a targets and microcystin targets) and mitigation of downstream nutrient impacts to receiving waterbodies may constitute a demonstration of the attainment of the nitrate, nitrogen, and orthophosphate-based seasonal biostimulatory wasteload allocations. Note that implementing parties are strongly encouraged to maximize overhead riparian canopy using riparian vegetation, where and if appropriate, because doing so could result in achieving nutrient-response indicator targets before allocations are achieved (resulting in a less stringent allocation);
5. MS4s may demonstrate progress toward and attainment of wasteload allocations through implementation and assessment of pollutant loading reduction projects and assessment of BMPs capable of achieving interim and final wasteload allocations identified in this TMDL in combination with water quality monitoring for a balanced approach to determining program effectiveness; and
6. Any other effluent limitations and conditions which are consistent with the assumptions and requirements of the wasteload allocations.

Industrial and Construction Stormwater Discharges

Based on evidence and information provided in the TMDL report (attachment 2 to the staff report), NPDES stormwater-permitted industrial facilities and construction sites in the Franklin Creek watershed would not be expected to be a significant risk or cause of the observed nutrient water quality impairments, and these types of facilities are generally expected to be currently meeting proposed wasteload allocations. Therefore, at this time, additional regulatory measures for this source category are not warranted. However, according to the U.S. Environmental Protection Agency and the State Water Resources Control Board, all NPDES-permitted point sources identified in a TMDL must be given a wasteload allocation, even if their current load to receiving waters is zero.

To maintain existing water quality and prevent any further water quality degradation, these permitted industrial facilities and construction operators shall continue to implement and comply with the requirements of the statewide Industrial General Permit (Order No. 2014-0057-DWQ, NPDES No. CAS000001) or the Construction General Permit (Order No. 2012-0006-DWQ, NPDES No. CAS000002), or any subsequent Industrial or Construction General Permits.

Available information does not conclusively demonstrate that stormwater from all industrial facilities and construction sites are meeting wasteload allocations. More information may be obtained during the implementation phase of these TMDLs to further assess the level of nutrient contributions to surface waters from these source categories, and to identify any actions needed to reduce nutrient loading.

Tracking and Evaluation

After the TMDLs are approved by OAL, the Central Coast Water Board periodically will perform a review of implementation actions, monitoring results, and evaluations submitted by responsible parties of their progress toward achieving their allocations, dependent upon staff availability and priorities. The Central Coast Water Board will use annual reports, nonpoint source pollution control implementation programs, evaluations submitted by responsible parties, and other available information to determine progress toward implementing required actions and achieving the allocations and numeric targets.

Responsible parties may also demonstrate that although water quality objectives are not being achieved in receiving waters, controllable sources of nitrogen and phosphorus compounds are not contributing to the exceedance. If this is the case, the Central Coast Water Board may re-evaluate numeric targets and allocations. For example, the Central Coast Water Board may pursue and

approve a site-specific objective. The site-specific objective would be based on evidence that natural conditions or background sources alone were the cause of exceedances of the Basin Plan water quality objectives.

Periodic reviews will continue until the water quality objectives are achieved. The implementation schedule for achieving this TMDL is 25 years after the date of approval by OAL (the effective date).

Optional Special Studies and Reconsideration of the TMDLs

Additional monitoring and voluntary optional special studies would be useful to evaluate the uncertainties and assumptions made in the development of these TMDLs. The results of special studies may be used to re-evaluate wasteload allocations and load allocations in these TMDLs. Implementing parties may submit work plans for optional special studies (if implementing parties choose to conduct special studies) for approval by the Executive Officer. Special studies completed and final reports shall be submitted for Executive Officer approval. Additionally, eutrophication is an active area of research. Consequently, ongoing scientific research on eutrophication and biostimulation may further inform the Central Coast Water Board regarding wasteload or load allocations that are protective against biostimulatory impairments, and help assess implementation timelines, and/or downstream impacts. At this time, staff maintains there is sufficient information to begin to implement these TMDLs and make progress towards attainment of water quality standards and the proposed allocations. However, in recognition of the uncertainties regarding nutrient pollution and biostimulatory impairments, staff proposes that the Central Coast Water Board reconsider the wasteload and load allocations, if merited by optional special studies and new research, ten years after the effective date of the TMDLs, which is upon approval by the OAL. A time schedule for optional studies and Central Coast Water Board reconsideration of the TMDL is presented in Table 4.9.20-5.

Further, the Central Coast Water Board may also reconsider these TMDLs, the nutrient water quality criteria, or other TMDL elements on the basis of potential future promulgation of a statewide nutrient policy for inland surface waters in the State of California.

Table 4.9.20-5. Time schedule for optional studies and Central Coast Water Board reconsideration of wasteload allocations and load allocations.

Proposed Actions	Description	Time Schedule-Milestones
Optional studies work plans	Implementing parties shall submit work plans for optional special studies (if implementing parties choose to conduct special studies) for approval by the Executive Officer.	By four years after the effective date of the TMDL
Final optional studies	Optional studies completed and final report submitted for Executive Officer approval.	By six years after the effective date of the TMDL
Reconsideration of TMDL	If merited by optional special studies or information from ongoing research into eutrophication issues, the Water Board will reconsider the wasteload allocations and load allocations and/or implementation timelines adopted pursuant to this TMDL.	By eight years after the effective date of the TMDL