CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

895 Aerovista Place, Suite 101
San Luis Obispo, California 93401

RESOLUTION NO. R3-2022-0002
AMENDMENT TO THE WATER QUALITY CONTROL PLAN FOR THE CENTRAL COASTAL BASIN TO ADOPT TOTAL MAXIMUM DAILY LOADS FOR TURBIDITY IN THE GABILAN CREEK WATERSHED, MONTEREY COUNTY, CALIFORNIA

CALIFORNIA
Water Boards
STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

WHEREAS, the California Regional Water Quality Control Board, Central Coast Region (hereafter Central Coast Water Board), finds that:

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 for waters of the state, including surface waters and groundwaters. The Basin Plan also includes implementation programs for achieving water quality objectives addressing point source and nonpoint source discharges, prohibitions, and the incorporation of statewide plans and policies. The current Basin Plan is the June 2019 Edition. The Central Coast Water Board has determined that the Basin Plan requires further revision and amendment.

2. The Basin Plan may be amended in accordance with Water Code section 13240 and following.

3. The Central Coast Water Board has determined the Basin Plan requires further revision and amendment to incorporate Total Maximum Daily Loads (TMDLs) for turbidity and an implementation plan for the Gabilan Creek watershed, as identified in the attached proposed Basin Plan amendment. The Gabilan Creek watershed includes the following waterbodies: Alisal Creek, Alisal Slough, Espinosa Slough, Gabilan Creek, Merritt Ditch, Natividad Creek, Old Salinas River, Salinas Reclamation Canal, Santa Rita Creek, and Tembladero Slough.

4. Pursuant to Water Code section 106.3, subdivision (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. Water Code section 106.3, subdivision (b), requires the Central Coast Water Board to consider how their actions impact the human right to water and 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.

5. On January 26, 2017, the Central Coast Water Board adopted Resolution No. R3-2017-0004,[1] resolving to continue to consider the human right to water when revising water quality control plans.

6. This proposed Basin Plan amendment promotes the state policy and Resolution No. R3-2017-0004 by establishing TMDLs for turbidity in the Gabilan Creek watershed. Streams in this watershed are designated for protection of human health, including beneficial uses for recreation and municipal and domestic water supply.

7. Consistent with the human right to water law and Resolution No. R3-2017-0004, the public process to consider this TMDL Project provided meaningful opportunities for

[1] https://www.waterboards.ca.gov/centralcoast/board_decisions/adopted_orders/2017/2017-0004_hrtw_fnl.pdf

individuals and communities that lack adequate, affordable, or safe drinking water to engage in Water Board activities and provide input to Water Board decisions that affect their communities.

8. Consistent with the human right to water law and Resolution No. R3-2017-0004, this TMDL Project regulates discharges to minimize loading to attain the highest water quality, which is reasonable, considering all demands being made on those waters and the total values involved.

9. The geographic scope of this TMDL Project encompasses the approximately 160 square mile Gabilan Creek watershed. Gabilan Creek is the major stream in the watershed that flows out of the Gabilan Mountains into an alluvial coastal valley. Gabilan Creek is the first of a series of interconnected waterbodies, including the Salinas Reclamation Canal, Tembladero Slough, and Old Salinas River, that drain to Moss Landing Harbor and the Pacific Ocean. Land use varies throughout the watershed with the Gabilan Mountains being mostly undeveloped. The valley floor is mainly comprised of lands intensively farmed with irrigated agricultural crops and developed urban lands. Irrigated agricultural crops comprised of primarily lettuce, broccoli, and strawberries dominate the rich alluvial valley floor. The major urban area is the City of Salinas, located in the center of the watershed, with a population of approximately 150,000.

10. Multiple waterbodies within the Gabilan Creek watershed are listed on the federal Clean Water Act section 303(d) List for water quality impairments due to turbidity. Consequently, the Central Coast Water Board is required to adopt TMDLs (40 Code of Federal Regulations, sections 130.6, subdivision (c)(1), and 130.7) and an associated implementation plan. (Water Code, section 13242.)

11. The Central Coast Water Board proposes to amend the Basin Plan by inserting amendments into Chapter 4, Section 9 (Total Maximum Daily Loads).

12. 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* (NPS Policy)[2] (see Resolution No. 2004-0030).[3] This TMDL Project is consistent with the NPS Policy. The NPS Policy requires the Regional Water Boards to regulate nonpoint sources of pollution using the administrative permitting authorities provided by Water Code division 7. Consistent with the NPS Policy and the Water Code, Regional Water Boards regulate nonpoint source discharges with waste discharge requirements, waivers of waste discharge requirements, and/or waste discharge prohibitions. Nonpoint sources of discharges in the Gabilan Creek watershed such as grazing, agricultural pumps, pump stations, and rural roads are not regulated using Water Board administrative permitting authorities. The NPS Policy requires both regulatory and non-regulatory programs

[2] https://www.waterboards.ca.gov/water_issues/programs/nps/docs/plans_policies/nps_iepolicy.pdf
[3] https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2004/rs2004-0030.pdf

(NPS programs) to develop and implement a NPS implementation plan that contains the five key elements described in the NPS Policy (see NPS Policy, chapter IV, part C, at pages 11-15).

13. On September 30, 2004, the State Water Board adopted the *Water Quality Control Policy for Developing California's Clean Water Act section 303(d) List* (California 303(d) Listing Policy)[4] (State Water Board Resolution No. 2004-0063,[5] as amended on February 3, 2015 by State Water Board Resolution No. 2015-0005).[6] The California 303(d) Listing Policy describes the process by which the State Water Board and the Regional Water Boards will comply with the listing requirements of the federal Clean Water Act (33 United States Code, section 1251 et seq.). 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. This TMDL Project is consistent with the California 303(d) Listing Policy.

14. On June 16, 2005, the State Water Board adopted the *Water Quality Control Policy for Addressing Impaired Waters: Regulatory Structure and Options* (Impaired Waters Policy)[7] (State Water Board Resolution No. 2005-0050).[8] 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 Boards have independent discretion, broad flexibility, numerous options, and some legal constraints that apply when determining how to address impaired waters. This TMDL Project is consistent with the Impaired Waters Policy.

15. The U.S. Environmental Protection Agency's (USEPA) published TMDL guidance[9] states that implementation of TMDLs and water quality-based controls should not be delayed due to lack of information or 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. Currently, there is sufficient information to develop and implement TMDLs for turbidity in the Gabilan Creek watershed.

16. The elements of a TMDL are described in 40 Code of Federal Regulations sections 130.2 and 130.7, Clean Water Act section 303(d), and USEPA guidance documents. A TMDL is defined as "[t]he sum of the individual [waste load allocations] for point sources and [load allocations] for nonpoint sources and natural background." (40

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[4] https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2015/020315_8_amendment_clean_version.pdf

[5] https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2004/rs2004-0063.pdf

[6] https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2015/rs2015_0005.pdf

[7] https://www.waterboards.ca.gov/water_issues/programs/tmdl/docs/iw_policy.pdf

[8] https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2005/rs2005-0050.pdf

[9] USEPA, G*uidance for Water Quality-Based Decisions: The TMDL Process*, ch. 1, Policies and Principles, EPA 440/4-91-001, April 1991

Code of Federal Regulations, section 130.2, subdivision (i).) The Central Coast Water Board has determined that the TMDLs for turbidity in the Gabilan Creek watershed are set at levels necessary to attain and maintain the applicable narrative and 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 Code of Federal Regulations section 130.7, subdivision (c)(1).

17. Upon establishment of a TMDL by the State or USEPA, the State is required to incorporate the TMDL into the State Water Quality Management Plan. (40 Code of Federal Regulations, sections 130.6, subdivision (c)(1), and 130.7.) In accordance with Water Code sections 13050, subdivision (j), and 13242, the State must also identify appropriate programs of implementation and implementation measures. 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.

18. The TMDLs for turbidity in the Gabilan Creek watershed are based on sound scientific knowledge, methods, and practices in accordance with California Health and Safety Code section 57004, which requires external scientific peer review for certain water quality control policies. This TMDL Project received scientific peer review by experts with substantial research experience in freshwater ecology, watershed sciences and modeling, and hydrogeomorphology. Consequently, the Central Coast Water Board has fulfilled the requirements of California Health and Safety Code section 57004.

19. Central Coast Water Board staff (staff) will conduct a review of implementation activities when monitoring and reporting data are submitted as required by the existing or future permit regulating the discharge of waste from irrigated agricultural land 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. Staff will pursue modification of permit conditions or other regulatory means, as necessary, to address remaining impairments resulting from turbidity during the TMDL implementation phase.

20. Adoption of these TMDLs and this 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 this Basin Plan amendment comply with all requirements of both state and federal anti-degradation requirements. (State Water Board, Resolution No. 68-16, [10] *Statement of Policy with Respect to Maintaining High Quality of Waters in California*; 40 Code of Federal Regulations, section 131.12.)

[10] https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/1968/rs68_016.pdf

21. Pursuant to Public Resources Code section 21080.5, the California Natural Resources Agency has approved the Regional Water Boards' basin planning process as a "certified regulatory program" that adequately satisfies the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code, section 21000 et seq.) for preparing environmental documents. (California Code of Regulations, title 14, section 15251, subdivision (g); California Code of Regulations, title 23, section 3775.) Staff has prepared Substitute Environmental Documentation (SED) for this project, which contains all required materials set forth in California Code of Regulations, title 23, section 3777. The SED includes the TMDL Project's Staff Report and several of its attachments, including the following:
    (1) Resolution No. R3-2022-0002 and Basin Plan amendment (Staff Report, Attachment 1);
    (2) TMDL Project Technical Report (Staff Report, Attachment 2);
    (3) CEQA Checklist and Analysis (Staff Report, Attachment 3);
    (4) TMDL Economic Analysis (Staff Report, Attachment 4);
    (5) Scientific Peer Review and Staff Responses to Comments (Staff Report, Attachment 5);
    (6) Notice of Public Hearing-Notice of Opportunity to Comment (Staff Report, Attachment 6); and
    (7) the Public Comments and Staff Responses to Comments (Staff Report, Attachment 7).

    The Environmental Checklist, based on Appendix G to the CEQA Guidelines (California Code of Regulations, title 14, section 15000 et seq.), and other portions of the SED contain significant analysis and numerous findings related to impacts and mitigation measures.

22. A CEQA scoping meeting was conducted on April 21, 2021, by remote participation; a notice of the CEQA scoping meeting was sent to interested persons on March 22, 2021. The notice 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 or email.

23. Public Resources Code section 21159, subdivision (a), 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. That section further states:

    > The environmental analysis shall, at minimum, include all of the following:
    > (1) An analysis of the reasonably foreseeable environmental impacts of the methods of compliance.
    > (2) An analysis of reasonably foreseeable feasible mitigation measures.
    > (3) An analysis of reasonably foreseeable alternative means of compliance with the rule or regulation.

(4) For a rule or regulation that requires the installation of pollution control equipment adopted pursuant to the California Global Warming Solutions Act of 2006 (Division 25.5 (commencing with section 38500) of the Health and Safety Code), the analysis shall also include reasonably foreseeable greenhouse gas emission impacts of compliance with the rule or regulation.

24. Public Resources Code section 21159, subdivision (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 proposed Basin Plan amendment, in particular the CEQA Environmental Checklist and analysis (Attachment 3), provides the environmental analysis required by Public Resources Code section 21159 and is hereby incorporated as findings in this Resolution.

25. In preparing the SED, the Central Coast Water Board considered the requirements of Public Resources Code section 21159 and California Code of Regulations, title 14, section 15187. Pursuant to these requirements, the SED contains an analysis of the reasonably foreseeable consequences of the adoption of this regulation from a programmatic perspective. The SED is not intended to be an exhaustive analysis of every conceivable impact. Compliance obligations will be undertaken directly by public agencies that may have their own obligations under CEQA. The SED identifies mitigation approaches that should be considered at the project level and project level impacts that 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 SED may be used to satisfy subsequent CEQA obligations of those agencies.

26. Consistent with the Water Board's substantive obligations under CEQA, the SED does not engage in speculation or conjecture and only considers reasonably foreseeable environmental impacts, including those relating to methods of compliance, reasonably foreseeable feasible mitigation measures to reduce those impacts, and reasonably foreseeable alternative means of compliance that would avoid or reduce the identified impacts.

27. The Staff Report, proposed Basin Plan amendment, and CEQA Environmental Checklist and associated analysis provide the necessary information pursuant to state law to conclude that the proposed TMDL Project and associated reasonably foreseeable methods of compliance will not have a significant adverse effect on the environment. This determination is based on best available information in an effort to fully inform the interested public and decision makers of potential environmental impacts. A "Significant effect" on the environment" is defined as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance." (California Code of Regulations, title 14, section 15382.)

28. Staff informed interested persons about the proposed TMDLs for turbidity in the Gabilan Creek watershed and draft SED through public outreach meetings with interested persons, public notice of the availability of the proposed Basin Plan amendment and draft SED, and a 45-day written comment period. Notice of public hearing and opportunity for public comment was given by advertising in newspapers of general circulation within the project area and by emailing a copy of the notice to applicable government agencies and all persons requesting such notice. Relevant documents and notices were also made available on the Central Coast Water Board website. Staff responded to oral and written comments received from the public and to each potentially significant environmental issue raised in those comments regarding the draft SED. All public comments were considered and received responses.

29. Upon adoption of this Resolution No. R3-2022-0002, the Central Coast Water Board will request that the State Water Board and California Office of Administrative Law review and approve the Basin Plan amendment incorporating the TMDLs for turbidity in the Gabilan Creek watershed. This TMDL Project will become effective upon approval by the California Office of Administrative Law. USEPA must also approve this TMDL Project.

30. The Basin Plan amendment may have an effect on fish and wildlife. The Central Coast Water Board will, therefore, forward fee payments to the California Department of Fish and Wildlife pursuant to Fish and Game Code section 711.4.

31. The proposed Basin Plan amendment meets the "Necessity" standard of the Administrative Procedures Act. (See Government Code, sections 11353 and 11349, subdivision (a).) As specified in Finding 17, 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, this TMDL Project defines programs of implementation for existing water quality objectives and is, therefore, appropriately a component of the Basin Plan under Water Code section 13242. The necessity of developing this TMDL Project is established in the TMDL Project Staff Report, the federal Clean Water Act section 303(d) List, and the data contained in the administrative record documenting the water quality impairments in Gabilan Creek watershed.

32. Consistent with Water Code section 13141, the Basin Plan amendment includes an estimate of the total cost of implementation of the agriculture-related portions of this TMDL Project and identifies potential sources of financing. In addition, Water Code section 13241 requires the Central Coast Water Board to consider economic factors when adopting water quality objectives or more stringent requirements than required under the federal Clean Water Act. However, this TMDL Project does not include new water quality objectives or more stringent requirements.

33. The Central Coast Water Board is adopting this TMDL Project as a Basin Plan amendment and CEQA Certified Regulatory Program regulations apply. (See California Code of Regulations, title 23, section 3775, et seq.) In accordance with California Code of Regulations, title 23, section 3777, the SED includes a reasonable range of economic factors for the reasonably foreseeable methods of compliance with this TMDL Project.

34. On February 17-18, 2022, the Central Coast Water Board held a public hearing to consider the Basin Plan amendment and SED and heard and considered all public comments and evidence in the record. Notice of the public hearing was given to all interested persons and published in accordance with Water Code section 13244. Notice of updated public hearing information was given to all interested persons in accordance with Government Code section 11125.

THEREFORE, be it resolved that:

1. The Central Coast Water Board, after considering the entire record, including oral testimony at the February 17-18, 2022 hearing, hereby adopts the Basin Plan amendment in Attachment A to this Resolution No. R3-2022-0002.

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 Water Code section 13245.

3. The Central Coast Water Board requests that the State Water Board approve the Basin Plan amendment in accordance with the requirements of Water Code sections 13245 and 13246 and forward the Basin Plan amendment to the Office of Administrative Law and to 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 Department of Fish and Wildlife.

5. If, during the approval process, Central Coast Water Board staff, State Water Board staff, the State Water Board, or the Office of Administrative Law determine that minor, non-substantive corrections to the language of the Basin Plan amendment are needed for clarity or consistency, the Executive Officer or their designee may make such changes, and shall inform the Central Coast Water Board of any such changes.

6. The SED prepared by the Central Coast Water Board staff pursuant to Public Resources Code section 21080.5 and California Code of Regulations, title 23, sections 3775-3782 are hereby approved and adopted.

I, Matthew T. Keeling, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, Central Coast Region, on February 17-18, 2022.

Matthew T. Keeling

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Date: 2022.03.04 10:35:17 -08'00'

Water Boards

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Matthew T. Keeling Executive Officer

Attachment: Attachment A to Resolution No. R3-2022-0002: Amendment to the Water Quality Control Plan for the Central Coastal Basin to Incorporate Total Maximum Daily Loads for Turbidity in the Gabilan Creek watershed, Monterey County, California

California Regional Water Quality Control Board

Central Coast Region

Attachment A to Resolution No. R3-2022-0002
Basin Plan Amendment

Amendment to the Water Quality Control Plan for the Central Coastal Basin to Adopt Total Maximum Daily Loads for Turbidity in the Gabilan Creek Watershed, Monterey County, California

Attachment A to Resolution No. R3-2022-0002

Revise the June 14, 2019 Basin Plan as follows:

Amendment to the Water Quality Control Plan for the Central Coastal Basin to Adopt Total Maximum Daily Loads for Turbidity in the Gabilan Creek Watershed, Monterey County, California

Add the following to Chapter 4 after section 4.9.21:
4.9.22. Total Maximum Daily Loads for Turbidity in the Gabilan Creek Watershed, Monterey County, California

The Central Coast Regional Water Quality Control Board adopted this TMDL Project on February 17-18, 2022.

This TMDL Project was approved by:

The State Water Resources Control Board on: _____ Date

The Office of Administrative Law on: _____ Date

The U.S. Environmental Protection Agency on: _____ Date

Problem Statement

All major surface waters in the lower Gabilan Creek watershed are highly impaired by turbidity and do not meet the Basin Plan general water quality objective for turbidity. Turbidity is an optical measure of stream water clarity, reported in nephelometric turbidity units (NTU). Turbidity can be caused by suspended solids such as clay, silt, finely divided inorganic and organic matter, algae, and other microscopic organisms in water that scatter light transmitted through the water and reduce clarity. At elevated levels, turbidity and associated suspended solids can have detrimental impacts on aquatic ecosystems and drinking water and recreation uses. Aquatic life beneficial uses impaired by turbidity conditions include the following: cold fresh water habitat (COLD), warm fresh water habitat (WARM), wildlife habitat (WILD), rare threatened or endangered species (RARE), estuarine habitat (EST), migration of aquatic organisms (MIGR), and spawning and reproduction and/or early development (SPWN). Waterbodies identified as impaired in this TMDL Project include:

- Gabilan Creek
- Natividad Creek
- Alisal Creek
- Salinas Reclamation Canal
- Tembladero Slough
- Old Salinas River
- Merritt Ditch

- Espinosa Slough
- Santa Rita Creek
- Alisal Slough

Source Analysis

The source of turbidity varies by land use type in the Gabilan Creek watershed. Different types of management conditions and activities in the watershed cause erosion of fine sediments and mobilization of instream fine sediments and therefore are sources of turbidity. Table 1 summarizes the land uses and turbidity sources along with responsible parties for managing sources.

Table 1. Table of land uses, associated turbidity sources, and responsible parties.

Type of Land Cover/Use	Turbidity Source	Responsible Parties
Natural Areas	Erosion from undeveloped areas and woodlands	Landowners, ranching operations
Wetlands	Channel maintenance	Monterey County Water Resources Agency (MCWRA), landowners, owners and operators of agricultural lands
Wetlands	Stream or channel bank erosion and resuspension/remobilization of fine sediments	MCWRA, landowners, owners and operators of agricultural lands
Croplands	Sediment erosion from strawberry fields with plastic mulch	Owners and operators of agricultural lands
Croplands	Irrigation runoff from farm fields	Owners and operators of agricultural lands
Croplands	Stormwater runoff from farm fields	Owners and operators of agricultural lands
Nurseries and Greenhouses	Stormwater runoff from impervious surfaces	Owners and operators of agricultural lands, cannabis cultivators
Rural roads	Roadside ditch erosion, stormwater runoff	County of Monterey, landowners, owners and operators of agricultural lands
Highways	Stormwater runoff from impervious surfaces causing highway shoulder and channel erosion	Caltrans
Grasslands	Grazing	Landowners and operators of ranching operations

Type of Land Cover/Use	Turbidity Source	Responsible Parties
All	Insufficient vegetative buffers along creeks	Landowners and land managers
Developed urban areas	Urban stormwater runoff	City of Salinas, County of Monterey
Developed urban areas	Construction stormwater runoff	Landowners
Developed urban areas	Industrial stormwater	Landowners
Drainage and Flood Control Infrastructure	Pumping (pump stations, agricultural drainage pumps)	MCWRA, owners and operators of agricultural lands

Controllable Water Quality Conditions

In accordance with the Basin Plan, controllable water quality conditions shall be managed to conform to or to achieve the water quality objectives and load allocations contained in this TMDL Project. 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, June 2019 edition, chapter 3, Water Quality Objectives, at page 30.)

Compliance with Anti-degradation Policy

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.

Section 3.2 of the Basin Plan states that wherever the existing quality of water in a stream reach, lake, or waterbody is better than the water quality objective established to protect and support the designated beneficial uses, that water quality shall be maintained and protected, unless and until warranted, pursuant to provisions in federal and state anti-degradation policies.

Compliance with anti-degradation requirements may be determined on the basis of trends in water quality in applicable waterbodies, consistent with the methodologies and criteria provided in section 3.10 of California's *Water Quality Control Policy for Developing California's Clean Water Act section 303(d) List* (California 303(d) Listing Policy) (State Water Resources Control Board (State Water Board) Resolution No. 2004-0063, adopted September 30, 2004, as amended by State Water Board Resolution No. 2015-0005, adopted February 3, 2015). Section 3.10 of the California 303(d) Listing Policy explicitly addresses the anti-degradation component of water quality standards, as defined in 40 Code of Federal Regulations section 131.12, and

provides for identifying trends of declining water quality as a metric for failing to comply 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: *"*A water segment shall be placed on the section 303(d) list 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*."*

Turbidity Numeric Targets

Numeric targets represent acceptable levels of turbidity that will result in the desired conditions for a waterbody. The Gabilan Creek watershed has three distinct geographic areas with separate numeric targets: the upper Gabilan Creek watershed headwaters have relatively undisturbed natural land cover and viable steelhead habitat, the lower alluvial valley has highly developed land that includes waterbodies from the base of the Gabilan Range to the brackish (tidally influenced) waters near the confluence of the watershed with Monterey Bay at Moss Landing. Interim and final turbidity numeric targets for waterbodies in the Gabilan Creek watershed are summarized in Table 2.

Upper Gabilan Creek Watershed (above Old Stage Road): Attainment of the final turbidity numeric targets (Table 2) for the upper Gabilan Creek watershed shall be assessed by comparing the seasonal 75th percentile value of samples collected from upper Gabilan Creek to the final numeric targets. Samples should be collected at even intervals (e.g., weekly or monthly) to evaluate numeric target attainment.

Interim targets are not established for waterbodies in the less disturbed upper Gabilan Creek watershed because this area has not been identified as impaired.

Lower Gabilan Creek Watershed above Brackish Waters: Both interim and final turbidity numeric targets are established for waterbodies in the lower Gabilan Creek watershed including Gabilan Creek (below Old Stage Road), Natividad Creek, Alisal Creek, Salinas Reclamation Canal, Santa Rita Creek, Espinosa Slough, Alisal Slough, Merritt Ditch, and Tembladero Slough (above tidal influence/brackish water).

Final numeric targets are equal to median turbidity levels (50th percentile) from reference sites with similar hydrogeomorphic characteristics to waterbodies in the lower Gabilan Creek watershed. Two interim numeric targets are established for each waterbody (Table 2): the first is equal to the 25th percentile of monitoring data from the each waterbody (e.g., the interim numeric target for Alisal Slough is equal to the 25th percentile of the data from Alisal Slough) and the second interim numeric target is equal to the 25th percentile of seasonal data from several monitoring sites in other agricultural watersheds in the Central Coast Region.

Lower Gabilan Creek Watershed within Brackish Waters: Interim numeric targets are established for brackish water reaches of the Old Salinas River and Tembladero slough,

in the lower watershed, but final targets are not established due insufficient monitoring data from reference sites.

Attainment of the turbidity numeric targets (Table 2) for the lower Gabilan Creek watershed and the brackish waters, shall be assessed by comparing the seasonal median value of samples collected from any given waterbody to the interim and/or final numeric targets for that waterbody.

Table 2. Interim and final turbidity numeric targets. Dry Season is May through September and Wet Season is October through April.

Waterbody (Site Number)	Interim Target -1 Dry Season (NTU)	Interim Target -1 Wet Season (NTU)	Interim Target-2 Dry Season (NTU)	Interim Target -2 Wet Season (NTU)	Final Target Dry Season (NTU)	Final Target Wet Season (NTU)	Final Target Year-Round (NTU)
Upper Gabilan Creek, headwaters above Old Stage Road	n/a	n/a	n/a	n/a	2.2	3.3	2.5
Gabilan Creek (309GAB)	40	124	12	21	6	11	8
Natividad Creek (309NAD)	53	38	12	21	6	11	8
Salinas Reclamation Canal/Alisal Creek (309ALG)	27	72	12	21	6	11	8
Merritt Ditch (309MER)	42	67	12	21	6	11	8
Santa Rita Creek (309RTA)	51	65	12	21	6	11	8
Salinas Reclamation Canal (309JON)	18	43	12	21	6	11	8

Waterbody (Site Number)	Interim Target -1 Dry Season (NTU)	Interim Target -1 Wet Season (NTU)	Interim Target-2 Dry Season (NTU)	Interim Target -2 Wet Season (NTU)	Final Target Dry Season (NTU)	Final Target Wet Season (NTU)	Final Target Year-Round (NTU)
Espinosa Slough (309ESP)	13	65	12	21	6	11	8
Alisal Slough (309ASB)	12	27	12	21	6	11	8
Tembladero Slough (309TEH)	57	84	12	21	6	11	8
Tembladero Slough (309TEM)	38	52	12	21	6	11	8
Tembladero Slough (309TDW) (brackish)	59	49	29	36	n/a	n/a	n/a
Old Salinas River (309OLD) (brackish)	29	36	29	36	n/a	n/a	n/a

1. To determine attainment of the final targets for streams in the upper Gabilan Creek watershed, compare the seasonal 75th percentile value of samples collected to the appropriate numeric target.
2. To determine the interim and final targets for streams in the lower Gabilan Creek watershed, including the brackish sties, compare the seasonal median value of samples collected to the appropriate numeric target.
n/a = not available

Biological Condition Numeric Targets

For a more complete evaluation of aquatic life water quality standards attainment, this TMDL Project has two types of biological condition numeric targets: one is based on biological assessments and the second is based on a rapid habitat assessment method.

<u>Biological Assessment: Taxa Richness of ≥ 24</u>

This biological condition numeric target is an interim numeric target for streams in the lower Gabilan Creek watershed and will need to be reevaluated in the future as habitat conditions improve and additional data becomes available for the watershed. The taxa richness score is a measurement of the number of different benthic macroinvertebrate taxa (e.g., genera or genus and species) observed at a monitoring site. Macroinvertebrate taxa include mayfly, caddisfly, dragonfly, and stonefly larvae, as well as snails, worms, beetles, etc. The data shall be collected in accordance with the current Surface Water Ambient Monitoring Program (SWAMP) standard operating

procedures for conducting biological assessments. There is no final numeric target established at this time, but one will be developed when sufficient data is available.

California Rapid Assessment Method (CRAM) Biotic Structure Score > 75
This biological condition numeric target is a final numeric target. Biotic Structure Score represents relative level of habitat diversity, biological integrity, food web support, etc., most directly supported by a functioning wetland's aquatic zone. The CRAM Biotic Structure Score assessment includes the plants, algae, and the primary producers that are directly impacted by turbidity. The Biotic Structure Scores can range from 0 to 100.

TMDLs

The Gabilan Creek watershed freshwater turbidity TMDLs are equal to the interim and final turbidity numeric targets found in Table 2. Compliance with the TMDLs shall be measured at receiving water monitoring sites (including but not limited to those sites mentioned in Table 2) and based on seasonal, even interval sampling (e.g., weekly or no less frequently than monthly).

Margin of Safety

The margin of safety component of a TMDL accounts for uncertainty concerning the relationship between pollution controls and water quality responses. (See 40 Code of Federal Regulations, section 130.7, subdivision (c)(1).) The margin of safety for these TMDLs is achieved through allocations and numeric targets based on numeric turbidity water quality objectives that are established from natural conditions. This turbidity water quality objective allows for an increase above the natural conditions in the range of 10 to 20 percent. The allocations and numeric targets do not incorporate the 10 to 20 percent increase above natural conditions. Establishing turbidity numeric targets and allocations at natural stream levels, without allowing for increases of 10 to 20 percent above natural, ensures protection of aquatic ecosystems and provides an explicit margin of safety.

An additional type of margin of safety included in this TMDL Project is found in the potential numeric targets from published studies on the effects of turbidity on aquatic ecosystems (i.e., effect levels known to interfere with aquatic life health). To derive the potential numeric target, a safety factor of 2 is applied to the published values (i.e., one half of the published effect level) to ensure protection of aquatic ecosystems. These potential numeric targets were not selected as final TMDL numeric targets since they are based on effect levels, or levels at which an adverse effect occurs, and therefore are not as protective as natural levels. The published values do, however, provide a level for comparison and assurances that key species are protected. The conservative difference between the potential turbidity numeric targets based on effect levels and the selected targets based on natural conditions provides another margin of safety.

Allocations

Turbidity TMDLs are allocated to point and nonpoint sources of discharge in the Gabilan Creek watershed (refer to Table 3). A TMDL is defined as "the sum of individual [waste

load allocations] for point sources and [load allocations] for nonpoint sources and natural background." (40 Code of Federal Regulations, section 130.2, subdivision (i).) For this TMDL Project, the turbidity TMDLs, load allocations, and waste load allocations are equal to the interim and final turbidity numeric targets defined in Table 2.

Table 3. Turbidity sources and type of allocation.

Turbidity Source	Type of Allocation
Urban stormwater runoff	Waste Load Allocations
Construction and industrial stormwater runoff	Waste Load Allocations
Highway stormwater runoff	Waste Load Allocations
Discharges with low threat to water quality, highly treated groundwater to surface waters, aquaculture facilities & aquariums	Waste Load Allocations
Irrigated agriculture/cropland	Load Allocations
Undeveloped areas and woodlands	Load Allocations
Grazing	Load Allocations
Wetlands (degraded streams and channels)	Load Allocations
Rural roads stormwater runoff	Load Allocations
Channel maintenance	Load Allocations
Pumping (pump stations and agricultural drainage pumps)	Load Allocations
Nurseries and greenhouses	Load Allocations

Attainment Schedule and Milestones for Turbidity Targets, TMDLs, and Allocations.

Waterbodies in the lower Gabilan Creek watershed are highly impaired by turbidity and the TMDL Project establishes a schedule of twenty years to achieve the final turbidity targets, TMDLs, and allocations. The TMDLs and allocations are equal to the interim and final turbidity numeric targets that are summarized in Table 2. The timeline for achieving the TMDL schedule and allocations starts upon the date of Office of Administrative Law (OAL) approval of these TMDLs and this Basin Plan amendment. The TMDL attainment schedule is as follows.

1) First Interim TMDL Milestone: This allocation is equal to the Interim Target – 1 and must be achieved **seven years** after OAL approval.

2) Second Interim TMDL Milestone: This allocation is equal to the Interim Target – 2 and must be achieved **fifteen years** after OAL approval.

3) Final TMDL Attainment Date: This allocation is equal to the Final Turbidity Target and must be achieved **twenty years** after OAL approval.

In addition, this TMDL Project includes two types of biological condition numeric targets: an interim benthic invertebrate taxa richness numeric target as a measure of aquatic health in response to improvements in turbidity conditions and a CRAM biotic structure numeric target. Although there is no TMDL attainment schedule established, these two biological condition numeric targets will be evaluated and considered when determinations are made whether waterbodies are achieving TMDL allocations and may be considered proxies for turbidity TMDL allocations (e.g., if biological numeric targets are achieved, it could be determined that the turbidity allocations are attained, despite the possibility of turbidity concentrations exceeding the turbidity numeric targets).

Implementation

Irrigated Agricultural Lands Discharges:
Discharges from irrigated agricultural lands are nonpoint sources of pollution, which are therefore not subject to federal NPDES permits, but which are regulated by state permitting authority. Permits regulating waste discharges from irrigated agricultural lands, currently the General Waste Discharge Requirements for Discharges From Irrigated Lands (Order No. R3-2021-0040; the "Agricultural Order") and the Monitoring and Reporting Program in accordance with Order No. R3-2021-0040, modified as necessary, will implement this TMDL Project for owners and operators of irrigated agricultural land in the Gabilan Creek watershed. Through the modified Agricultural Order or any successor permit, owners and operators of irrigated agricultural lands must comply with permit terms and conditions established to meet load allocations, achieve the TMDLs according to the TMDL attainment schedule, and help rectify the impairments addressed in this TMDL Project. The current Agricultural Order regulates:

(1) discharges of waste from commercial irrigated lands, including, but not limited to, land planted to row, vineyard, field and tree crops where water is applied for producing commercial crops;

(2) discharges of waste from commercial nurseries, nursery stock production, and greenhouse operations with soil floors that do not have point source-type discharges and are not currently operating under individual WDRs; and

(3) discharges of waste from lands that are planted to commercial crops that are not yet marketable, such as vineyards and tree crops.

The current Agricultural Order requires owners and operators of irrigated lands to do the following:

A. Comply with load allocations and achieve the applicable TMDLs that have been incorporated into the Agricultural Order as surface receiving water limits.

B. Conduct surface receiving water quality monitoring and reporting to evaluate the impact of irrigated agricultural waste discharges on receiving waters; evaluate the condition of existing perennial, intermittent, and ephemeral streams and

wetland areas; assist in the identification of specific sources of water quality problems; and evaluate compliance with load allocations.

C. Identify and implement follow-up actions including outreach, education, additional monitoring and reporting, and management practices to abate sources of water quality impacts and meet interim milestones and load allocations.

D. Potentially complete ranch-level surface discharge monitoring and reporting in areas where water quality issues persist or applicable load allocations are not met by their compliance dates.

E. Report on irrigation system type, discharge type, slope, impermeable surfaces (i.e., plastic covered surfaces that do not allow fluid to pass through, including polyethylene mulch and hoop houses), and presence and location of any waterbodies on or adjacent to irrigated lands.

F. Manage stormwater discharge intensity and volume from fields with 50 to 100 percent coverage of impermeable surfaces or with greater than or equal to 0.5 acre of impermeable surfaces so as not to exceed stormwater discharges from the equivalent permeable field area.

G. Implement, assess, and report on all sediment, erosion, irrigation, stormwater, road, agricultural drainage pump, and impermeable surface management practices and maintain records of all management practices used to reduce erosion and sediment loading.

H. Avoid disturbance (e.g., removal, degradation, or destruction) of existing, naturally occurring, and established native riparian vegetative cover and report on average width and length of riparian area.

The agricultural monitoring and reporting program for turbidity in the watershed must be adequate to determine progress toward achieving load allocations with sufficient statistical power. Upon approval of the TMDLs, the existing monitoring and reporting requirements of the Agricultural Order must be evaluated to determine whether they are adequate. If the requirements of the Agricultural Order are inadequate, then the monitoring and reporting program should be updated through the development of follow-up implementation work plans as required in the Agricultural Order. Follow-up implementation planning must consider the level of water quality impairment identified through surface receiving water monitoring. Where necessary, planning must identify follow-up actions to restore degraded areas and meet interim and final load allocations and additional surface receiving water monitoring locations for pollutant source identification and abatement.

<u>Storm Drain Discharges to Municipal Separate Storm Sewer Systems (MS4s):</u>

The two MS4s in the watershed, City of Salinas and Monterey County, are required to implement and comply with the TMDLs. Both MS4s must develop implementation plans to attain waste load allocations in the receiving waters into which they discharge.

City of Salinas:

The City of Salinas is subject to a Phase I MS4 Stormwater Permit (currently Order No. R3-2019-0073, NPDES No. CA0049981 or any future order regulating these discharges). This Permit requires the City to comply with applicable interim and final water quality-based effluent limitations and associated compliance schedules that implement the waste load allocations assigned to the City in approved TMDLs. Within one year of approval by the OAL, the City must prepare a plan to address the TMDL waste load allocations assigned to the City. The Permit requires the City's plan, referred to as a Pollutant Load Reduction Plan, to address all waterbody-pollutant combinations identified in the Permit, for which the City has not yet demonstrated waste load allocation attainment. As such, the City will be required to update its Pollutant Load Reduction Plan to incorporate its assigned interim and final waste load allocations for turbidity in the Lower Gabilan Creek Watershed. In addition, the City will be required to meet the requirements of the reissued permit, which will incorporate the TMDL waste load allocations and TMDL attainment schedule.

Monterey County:

The County is subject to the State Water Board Phase II MS4 General Stormwater Permit (Order No. 2013-0001 DWQ or any future order regulating these discharges). This General Permit requires the County to develop, submit, and begin implementation of a Waste Load Allocation Attainment Program that identifies actions the County will take to attain its waste load allocation within one year following approval of this TMDL by the Office of Administrative Law, or within one year of General Permit renewal, whichever comes first. The following permit requirements related to TMDL attainment may change in subsequent permit reissuances and the County is required to implement updates.

The Waste Load Allocation Attainment Program shall include:

1. A detailed description of the strategy the MS4 will use to guide Best Management Plan (BMP) selection, assessment, and implementation to ensure that BMPs implemented will be effective at abating pollutant sources, reducing pollutant discharges, and achieving waste load allocations according to the TMDL schedule.
2. Identification of sources of the impairment within the MS4's jurisdiction, including specific information on various source locations and their magnitude within the jurisdiction.
3. Prioritization of sources within the MS4's jurisdiction, based on suspected contribution to the impairment, ability to control the source, and other pertinent factors.
4. Identification of BMPs that will address the sources of impairing pollutants and reduce the discharge of impairing pollutants.

5. Prioritization of BMPs, based on suspected effectiveness at abating sources and reducing impairing pollutant discharges, as well as other pertinent factors.
6. Identification of BMPs the MS4 will implement, including a detailed implementation schedule. For each BMP, identify milestones the MS4 will use for tracking implementation, measurable goals the MS4 will use to assess implementation efforts, and measures and targets the MS4 will use to assess effectiveness. MS4s shall include expected BMP implementation for future implementation years, with the understanding that future BMP implementation plans may change as new information is obtained.
7. A quantifiable numeric analysis that uses published BMP pollutant removal estimates, performance estimates, modeling, best professional judgment, and/or other available tools to demonstrate that the BMP selected for implementation will likely achieve the MS4's waste load allocation by the schedule identified in the TMDL. This analysis will most likely incorporate modeling efforts. The MS4 shall conduct repeat numeric analyses as the BMP implementation plans evolve and information on BMP effectiveness is generated. Once the MS4 has water quality data from its monitoring program, the MS4 shall incorporate water quality data into the numeric analyses to validate BMP implementation plans.
8. 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' waste load allocation. The monitoring program shall be designed to validate BMP implementation efforts and quantitatively demonstrate attainment of interim targets and waste load allocations.
9. If the approved TMDL does not explicitly include interim targets, the MS4 shall establish interim targets (and dates when stormwater discharge conditions will be evaluated) that are equally spaced in time over the TMDL attainment schedule and represent measurable, continually decreasing MS4 discharge concentrations or other appropriate interim measures of pollution reduction and progress towards the waste load allocation. At least one interim target and date must occur during the first five years commencing on January 1, 2019. The MS4 shall achieve its interim targets by the date it specifies in the Waste load Allocation Attainment Program. If the MS4 does not achieve its interim target by the date specified, the MS4 shall develop and implement more effective BMPs that it can quantitatively demonstrate will achieve the next interim target.
10. A detailed description of how the MS4 will assess BMP and program effectiveness. The description shall incorporate the assessment methods described in the CASQA Municipal Storm Water Program Effectiveness Assessment Guide.
11. A detailed description of how the MS4 will modify the program to improve upon BMPs determined to be ineffective during the effectiveness assessment.
12. A detailed description of information the MS4 will include in annual reports to demonstrate adequate progress towards attainment of waste load allocations according to the TMDL schedule.

13. A detailed description of how the MS4 will collaborate with other agencies, stakeholders, and the public to develop and implement the Wasteload Allocation Attainment Program.
14. Any other items identified by Integrated Report fact sheets, TMDL Project Reports, TMDL Resolutions, or that are currently being implemented by the MS4 to control its contribution to the impairment.

Non-stormwater discharges consist of all discharges from an MS4 that do not originate from precipitation events. The stormwater permits pertaining to the City and County effectively prohibit non-stormwater discharges through an MS4 into waters of the United States. Certain categories of non-stormwater discharges are conditionally exempt from the prohibition of non-stormwater discharge as specified at 40 Code of Federal Regulations section 122.26(d)(2)(iv)(B)(1). Non-stormwater discharges that are regulated by a separate NPDES permit are not subject to the discharge prohibition.

MS4 Monitoring

MS4 entities with operations and stormwater conveyance systems discharging to receiving waters in the Gabilan Creek watershed are currently required to develop and submit monitoring programs as part of their permit requirements. For the City, the goals of their monitoring program are described in the requirements of their Pollution Load Reduction Program and for the County they are described in their Waste Load Allocation Attainment Program. Monitoring in the watershed should continue to include data for turbidity, total suspended solids, and flow. The City should monitor receiving waters at a minimum of three samples per year that coincide with existing outfall monitoring and reporting requirements. The City should conduct monitoring in the following receiving waters and at the following monitoring sites (at a minimum):

- Gabilan Creek (309GAB)
- Natividad Creek (309NAD)
- Alisal Creek (309ALG or 309ALU)
- Salinas Reclamation Canal at the confluence of Carr Lake (new site to be determined)
- Salinas Reclamation Canal (309ALD) below the City

These MS4 entities must develop and submit creative and meaningful monitoring and implementation programs. Monitoring strategies can use a phased approach, for example, by phasing in outfall or receiving water monitoring after BMPs have been implemented and assessed for effectiveness. Pilot projects, where BMPs are implemented in well-defined areas covering a fraction of the MS4 entity, may facilitate accurate assessment of how well the BMPs control the discharge of turbid water and manage increased flows from impervious surfaces and hydromodification. Successful practices would then be implemented in other or larger parts of the MS4 entity.

Industrial and Construction Stormwater Discharges:

Industrial facilities and construction operators are expected to meet the proposed waste load allocations through their existing permits. 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. 2009-0009 amended by 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.

Dischargers disturbing one or more acres are required to enroll under the Construction General Permit. The Construction General Permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer. The SWPPP development includes site assessment and sediment and erosion control BMP selection.

The Industrial General Permit regulates industrial stormwater discharges from industrial facilities in California. Industrial facilities such as manufacturers, landfills, mining, steam generating electricity, hazardous waste facilities, transportation with vehicle maintenance, larger sewage and wastewater plants, recycling facilities, oil and gas facilities, and agricultural processing facilities are typically required to obtain Industrial General Permit coverage. Except for non-stormwater discharges authorized in Section IV of the Industrial General Permit, discharges of liquids or materials other than stormwater, either directly or indirectly to waters of the United States, are prohibited unless authorized by another NPDES permit. Unauthorized (unpermitted) non-stormwater discharges must be either eliminated or the discharger must seek authorization under a separate NPDES permit.

Monterey County Regional Stormwater Resource Management Plan:
TMDLs will be implemented through projects designed to restore aquatic and riparian habitat or reduce turbidity that are identified in the Monterey County Regional Stormwater Resource Management Plan (Regional Plan) The Greater Monterey Integrated Regional Water Management (IRWM) stakeholders developed this Regional Plan as comprehensive stormwater management strategy for the greater Monterey Region, which encompasses the Gabilan Creek watershed. The Regional Plan is an integrated approach implemented by collaborating stormwater management agencies and other stakeholders to optimize their stormwater planning and implementation efforts. The IRWM planning group represents government agencies, nonprofit organizations, educational organizations, water service districts, private water companies, and organizations representing agricultural, environmental, and community interests.

Prohibition of Discharge:
Unpermitted land disturbance activities such as road grading, channel maintenance, and channel dredging are identified as potential sources of turbidity in the TMDL. Beneficial uses of waters are protected from unauthorized discharges of sediment and organic materials by a land disturbance prohibition in the Basin Plan, section 4.8.5.1. This prohibition, or any future prohibitions addressing land disturbance, sediment discharges, or any activity that impacts turbidity in waters of the State, applies to unauthorized discharges in the watershed.

Pump Stations

MCWRA operates pump stations in several streams in the lower Gabilan Creek watershed and large volume discharges from the pumps are sources of turbidity. The pump stations house large instream pumps used for flood control and to drain low-lying stream channels in agricultural areas (to prevent ponding and flooding of historic lakebeds and sloughs). The pumps were originally constructed and operated by agricultural landowners but are currently operated and maintained by MCWRA. Although MCWRA operates these pumps, both landowners and MCWRA are both responsible parties for meeting load allocations.

The pump stations discharge agricultural waste and the MCWRA pumps actively move water and sediment that would not otherwise move into and along waters of the State. Further, these pumps discharge high velocity flow into the downstream channels and consequently resuspend sediment and/or cause erosion that would not otherwise occur. The pumps are nonpoint sources of pollution and discharges from these pumps are not regulated by any permit. Therefore, to implement this TMDL Project, responsible parties must develop a Nonpoint Source (NPS) program that meets the five key elements of the Nonpoint Source Policy. The ultimate purpose of their NPS program is to meet the receiving water turbidity TMDL numeric targets and the turbidity water quality objectives.

Within one year of TMDL approval by OAL, MCWRA shall submit the NPS implementation plan to the Central Coast Water Board's Executive Officer for approval. The five key elements of a NPS program must include the following:

1. A NPS control implementation program's ultimate purpose must be explicitly stated and at a minimum address NPS pollution control in a manner that achieves and maintains water quality objectives.
2. The implementation program shall include a description of the management practices (MPs) and other program elements dischargers expect to implement, along with an evaluation program that ensures proper implementation and verification.
3. The implementation program shall include a time schedule and quantifiable milestones, should the Regional Water Board require these.
4. The implementation program shall include sufficient feedback mechanisms so that the Regional Water Board, dischargers, and the public can determine if the implementation program is achieving its stated purpose(s), or whether additional or different MPs or other actions are required (e.g., a monitoring and reporting program).
5. Each Regional Water Board shall make clear, in advance, the potential consequences for failure to achieve an implementation program's objectives, emphasizing that it is the responsibility of individual dischargers to take all necessary implementation actions to meet water quality requirements (potential consequences are described in the following paragraph).

MCWRA may proactively implement a NPS program and meet their TMDL load allocations using agency resources along with outside funding, such as grants.

However, failure to implement projects that address the pump station contribution to turbidity in receiving waters may result in the Central Coast Water Board addressing discharges through regulatory mechanisms such as waste discharge requirements, conditional waivers of waste discharge requirements, or cleanup and abatement orders.

Agricultural Drainage Pumps

Agricultural drainage pumps owned and operated by individual property owners and operators are a source of turbidity in the watershed that are identified in section 7.3 of the TMDL technical report (Attachment 2) and dischargers operating agricultural pumps must implement management practices in accordance with the Agricultural Order or any subsequent version to achieve load allocations and turbidity water quality objectives in the Basin Plan.

The Agricultural Order 4.0 specifically addresses agricultural drainage discharges as follows:

> **Waste Discharge Control and Prohibition**: *Dischargers who utilize agricultural drainage pumps must implement management practices to dissipate flow and prevent channel and/or streambank erosion resulting in increased sediment transport and turbidity within surface water.*[1]

In addition, dischargers enrolled in the current Agricultural Order must include a description of management practices to control pump discharges in the Sediment and Erosion Management Plan (SEMP) section of their Farm Water Quality Management Plan. Dischargers must submit summary information from the SEMP in the Annual Compliance Form including management practice implementation, assessment, and effectiveness to reduce water quality impacts from pumping.

Rangeland and Natural Areas:

Ranchers and landowners in the Gabilan Creek headwaters proactively implement practices to protect water quality. If monitoring data indicates that TMDL load allocations and water quality standards are not met in the future, responsible parties will be required to develop and implement a NPS program that meets the five key elements of the NPS Policy and regulatory approaches will be considered.

Highways and Rural Paved Roads

Stormwater discharges from State highways are regulated under the Caltrans Statewide Order No. 2012-0011-DWQ, NPDES NO. CAS000003 or a future order regulating these discharges. To maintain and protect water quality and prevent any further water quality degradation, Caltrans shall continue to implement and comply with the requirements of the statewide permit. TMDL allocations for turbidity apply at the watershed level and Caltrans shall assess their contribution to turbidity impairments and develop a plan to meet their waste load allocations. The assessment shall identify sources, Caltrans' contribution to loading, and the effectiveness of existing BMPs in addressing

[1] Order No. R3-2021-0040, Part. 2, Section D, at page 44, paragraph 14.

sedimentation and hydromodification. The implementation plan shall include implementation measures, monitoring, and a time schedule to achieve their waste load allocations. Within one year of TMDL approval by OAL, Caltrans shall submit the assessment and implementation plan to the Central Coast Water Board or the Executive Officer for approval.

Monterey County rural roads and right of way ditches outside of the Monterey County's MS4 boundaries are nonpoint sources of turbidity. Monterey County Public Works shall develop a NPS program to meet load allocations. The implementation program must include the five key elements described in the NPS Policy (as described above in the section titled Pump Stations). Within one year of TMDL approval by OAL, Monterey County Public Works shall submit a NPS implementation plan to the Central Coast Water Board for approval by the Water Board's Executive Officer. Monterey County may proactively implement a NPS program and meet their TMDL load allocations using agency resources along with outside funding such as grants. However, failure to implement projects that address Monterey County's contribution to turbidity in receiving waters may result in the Central Coast Water Board addressing discharges through regulatory mechanisms such as waste discharge requirements, conditional waivers of waste discharge requirements, or cleanup and abatement orders.

Cannabis Cultivation

Owners, operators, and landowners of commercial cannabis operations will implement the TMDLs through achieving the TMDL load allocations, completing the requirements established in this TMDL implementation plan, and complying with the General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Dischargers of Waste Associated with Cannabis Cultivation Activities (Order No. WQ 2019-0001-DWQ) (Cannabis General Order), the associated monitoring and reporting program, and any future permits regulating the discharge of waste from commercial cannabis operations. The State Water Board regularly updates the Cannabis General Order to improve implementation, clarify requirements, and incorporate changes to applicable water quality control plans.

In addition to the requirements described in the current Cannabis General Order, this TMDL implementation plan also establishes additional requirements aimed to reduce turbidity impairments in the Gabilan Creek watershed. All cannabis cultivators in the Gabilan Creek watershed must develop a sitewide Sediment Discharge Monitoring and Reporting Plan. At a minimum, the plan must include:

- Sitewide Stormwater Management Plan, including location and condition of all stormwater conveyance channels. This plan must include a time schedule for rehabilitating all unstable conveyances.
- Monthly stormwater runoff monitoring for turbidity and pH and reporting of site maintenance status. Sampling locations must represent stormwater discharging from the cannabis disturbed area. Multiple sampling locations may be necessary to characterize the discharge from all disturbed areas. The Cannabis General Order includes additional details for stormwater monitoring and site maintenance status reporting.

- Instream (receiving water) turbidity monitoring for sites that are adjacent to surface water and have any amount of unstable ground present on site or are undergoing land disturbing activities. Samples must be taken for all days in which flow is present in the channel when land disturbing activities are taking place or ground conditions are unstable. Monitoring must include the following:
    - Quantification of baseline turbidity levels by sampling instream levels prior to work commencing for land disturbing activities or in dry weather for unstable ground conditions present on site.
    - Quantification of relative increase in turbidity, if any, due to land disturbing activities onsite or unstable ground conditions by taking instream samples upstream and downstream of disturbed area.

The effectiveness of erosion prevention and sedimentation control measures will be determined by comparing discharge events and instream receiving water monitoring to load allocations.

Other discharges regulated by NPDES General Permits

The TMDLs and waste load allocations will be further implemented through the Central Coast Water Board's NPDES general permits or future permits regulating discharges to surface waters in the Gabilan Creek watershed.

- General Permit for Discharges with Low Threat to Water Quality – NPDES No. CAG993001
- General Permit for Discharges of Highly Treated Groundwater to Surface Waters – NPDES No. CAG993002
- General Permit for Discharges from Aquaculture Facilities and Aquariums – NPDES Permit No. CAG993003

Dischargers must enroll in all the appropriate general permits and meet the waste load allocations assigned in each permit.

Channel Maintenance

The State Water Resources Control Board and the Central Coast Water Board have the authority to regulate discharges of dredged or fill materials under section 401 of the federal Clean Water Act (CWA) and the Porter-Cologne Water Quality Control Act (Porter-Cologne).

CWA section 401 water quality certifications are issued to applicants for a federal license or permit for activities that may result in a discharge into waters of the United States, including but not limited to the discharge or dredged or fill material. WDRs under Porter-Cologne are issued for discharges of dredged or fill material to waters of the State. Applicants must submit a monitoring and reporting plan and verify that discharges meet load allocations.

Tracking and Evaluation

After the TMDLs are approved by OAL, the Central Coast Water Board will periodically review 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 updates to the federal Clean Water Act section 303(d) List of impaired waters (303(d) List), annual reports from dischargers required to submit such reports, NPS program monitoring data and reports, evaluations submitted by responsible parties, and other available information to determine progress toward implementing required actions and achieving the allocations and numeric targets.

Central Coast Water Board staff may conclude in future reviews that ongoing implementation efforts are insufficient to ultimately achieve the allocations and numeric targets. If this occurs, Central Coast Water Board staff will recommend revisions to this TMDL Implementation Plan. Alternatively, Central Coast Water Board staff may conclude and articulate in the reviews that implementation efforts are likely to result in achieving the allocations and numeric targets, in which case existing and anticipated implementation efforts should continue. When allocations and/or numeric targets are met, Central Coast Water Board staff will recommend the waterbody be removed from the 303(d) List for turbidity.