



**REGIONAL WATER QUALITY CONTROL BOARD,
CENTRAL VALLEY REGION**

**2024 JOINT TRIENNIAL REVIEW
OF THE WATER QUALITY CONTROL PLANS
FOR THE SACRAMENTO RIVER AND SAN
JOAQUIN RIVER BASINS AND TULARE
LAKE BASIN**

Proposed Workplan

October 2024

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I. INTRODUCTION

To meet requirements of Section 303(c)(1) of the Federal Clean Water Act (CWA) and Section 13240 of the Water Code, the Central Valley Regional Water Quality Control Board (Central Valley Water Board or Board) reviews the Water Quality Control Plans for the Sacramento River and San Joaquin River Basins and the Tulare Lake Basin (Basin Plans) every three years. The process is known as the Triennial Review. The Basin Plans are the foundation for the Central Valley Water Board's water quality regulatory programs. The Basin Plans contain:

- Designated beneficial uses for both surface and ground water bodies in the three basins that make up the Central Valley
- Water quality objectives to protect those beneficial uses
- Implementation plans that describe the actions necessary to achieve water quality objectives
- Descriptions of the surveillance and monitoring activities needed to determine regulatory compliance and assess the health of the Basins' water resources

This Triennial Review Workplan will be used to direct Basin Planning efforts over the next three years. Implementation depends upon the Central Valley Water Board's program priorities, resources, and other mandates and commitments. The 2024 Triennial Review Workplan includes a review of Basin Plan amendments since the 2021 Triennial Review, an overview of the proposed projects (Appendix I), available Board resources, and project prioritization and ranking.

In the Triennial Review, the CWA requires the Central Valley Water Board to consider modifying or adopting new water quality objectives. In recognition that meaningful and transparent involvement of the public is an important component of the Triennial Review, USEPA adopted the 2015 Water Quality Standards Regulatory Revisions rule. (80 Fed. Reg. 51020 (Aug. 21, 2015).) This rule modified 40 CFR 131.20(a) to require states to provide an explanation for why they are not adopting new or revised criteria for parameters which USEPA has published new or updated CWA section 304(a) criteria recommendations. Pursuant to 40 CFR 131.20(a), the Board does not plan to adopt new or revised criteria for parameters which USEPA has published new or revised 304(a) recommendations due to resource limitations and other priority projects outlined further in this Workplan.

Additionally, for statewide criteria, the Central Valley Water Board will continue to rely on the State Water Resources Control Board (State Water Board) and its ongoing and planned statewide efforts.

II. TRIENNIAL REVIEW PROCESS

Each Triennial Review begins with a solicitation where the Board asks the public and the tribes to comment on water quality issues or concerns that may need to be addressed through amendments to the Basin Plan(s). The Board initiated the 2024

Triennial Review on 05 January 2024 with a 45-day project solicitation comment period. Central Valley Water Board staff (Board staff) reviewed and prepared responses to all submitted comments which were used to develop the 2024 Triennial Review Draft Workplan. A 30-day public comment period on the Draft Workplan started on 26 June 2024. Both of the comment period notices were emailed to over 1,200 entities. A hybrid Staff Workshop was held on 08 July 2024 in the Rancho Cordova office and via Microsoft Teams to receive oral comments. Board staff received sixteen written comment letters during both comment periods (eight comment letters during each period).

Board staff reviewed and prepared responses to all submitted comments which were used to develop the proposed 2024 Triennial Review Workplan. The Fact Sheets in Appendix I list commenters for each project. The comments received were on a variety of issues impacting water quality. In response to the comments received, staff are proposing four new projects for inclusion. The projects are presented in Section IV (Table 3).

Board staff developed Project Prioritization Criteria as part of the 2018 Triennial Review and was continued for the 2021 Triennial Review. The 2024 Triennial Review continues to utilize the Project Prioritization Criteria. The Prioritization Criteria is included as **Table 1** below.

Table 1: Prioritization Criteria

Criteria	Definition
Project Addresses Tribal Interests or Specifically Addresses the Human Right to Water	While all Basin Planning projects must be consistent with the Human Right to Water, certain projects specifically address this need in disadvantaged communities or in tribal communities.
Projects that Represent an Efficient Use of Board or Public Resources	Projects with resource commitments from other agencies and/or stakeholders or that build upon existing studies or research and represent an efficient use of Board or Public resources. Factors to be considered include cost effectiveness, environmental benefit, and correction of Basin Plan provisions, especially where addressing unnecessary public cost.
Projects to Address Impediments to Water Recycling/ Efficient Use/ Integrated Water Management	These projects modify Basin Plan provisions that may interfere with statewide goals of promoting water recycling, efficient water use, and integrated water management. Such projects may also further Sustainable Groundwater Management Act (SGMA) implementation goals.
Projects that Complement Prior Work	Certain projects may complement the regulatory intent or directives in separate Board-issued Orders or Basin Plan amendments.
Projects of Special Stakeholder Interest	Projects of special importance due to their value to stakeholders, including federal agencies (including the United States Environmental Protection Agency (USEPA)), State Agencies, Local Agencies, or NGOs.
Projects that Address a 303(d) Listed Water Quality Impairment or Threat of Impairment	Projects that would result in a delisting from the CWA Section 303(d) list of impaired waterbodies for one or more pollutants. Or projects that may mitigate one or more pollutants that may result in addition to the 303(d) list of waterbodies.
Projects that Support the Board's Efforts on Climate Change	Projects that implement climate change adaptation priorities, including actions taken to build resilience and to adjust to the impacts of climate change on society and the environment.

The 2018 Triennial Review and the 2021 Triennial Review used five ranking categories based on the above criteria. This effort is continued in the 2024 Triennial Review Workplan. **Table 2** summarizes these ranking categories.

Table 2: Ranking Categories

Category	Definition
Rank 1: Existing Commitments	Projects that the Board has made a legally-enforceable regulatory commitment to completing, Board adopted efforts, or Board Resolutions directing staff to prioritize
Rank 2: Special Status	Projects that are a Board high-priority
Rank 3	Projects that meet three or more of the prioritization criteria
Rank 4	Projects that meet at least two of the prioritization criteria
Rank 5	Projects that meet one of the prioritization criteria

III. BASIN PLAN AMENDMENTS ADOPTED SINCE LAST TRIENNIAL REVIEW (2021)

Since the last Triennial Review (2021), the following Basin Plan amendment was adopted for the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins or Tulare Lake Basin and was approved by the State Water Board and the Office of Administrative Law. It is currently undergoing review by U.S.EPA:

- Amendments to the Water Quality Control Plans for the Sacramento River and San Joaquin Basins and Tulare Lake basin to add definitions for three new beneficial uses—tribal tradition and culture (CUL), tribal subsistence fishing (T-FISH), and subsistence fishing (SUB)

The following Basin Plan amendment for the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins or Tulare Lake Basin have been adopted by the Central Valley Water Board but are not yet fully approved and in effect:

- Region-Wide MUN Evaluation Process in Agriculturally Dominated Surface Water Bodies and Removing MUN from 231 Constructed or Modified Ag Drains in the San Luis Canal Company District (R5-2017-0088)

IV. EXISTING AND POTENTIAL PROJECTS

The 2021 Triennial Review Workplan identified 30 proposed projects to address water quality issues specified during the 2021 Triennial Review Solicitation and in prior Triennial Reviews.

Many of the 2021 Triennial Review Workplan projects were renumbered in the 2024 Triennial Review Workplan. Projects 18 and 19 in the 2021 Triennial Review Workplan appear as Projects 17 and 18, respectively, in this 2024 Triennial Review Workplan. Similarly, Projects 22 through 33 from the 2021 Triennial Review Workplan have been decreased by three to account for removed projects. The renumbered projects from the 2021 Triennial Review are as follows:

1. Support for Basin Planning and Implementation Activities Related to the Salt and Nitrate Control Program
2. Tribal Beneficial Uses
3. Guidance for Seasonal Beneficial Uses and Diurnal Variations
4. MUN and AGR in Oil Production Zones
5. Grower-Proposed Basin Plan Amendment Work Plans Submitted under Irrigated Lands General Waste Discharge Requirements
6. Individual Beneficial Use Evaluation for West Squaw Creek
7. Individual Beneficial Use Evaluation for Grassland Water Supply Channels
8. Individual Beneficial Use Evaluation for Groundwater Beneath Sulphur Bank Mine in Lake County
9. Appropriate Aquatic Life Beneficial Use Designations in Agriculturally-Dominated Water Bodies and Agricultural Conveyance Facilities
10. Evaluation of Effluent-dominated and Individual Water Bodies Dominated by NPDES Discharges
11. Temperature Criteria and Objectives
12. Dissolved Oxygen Objectives
13. Ammonia Water Quality Objectives
14. Review of Proposed USEPA Water Quality Criteria and 304(a) Criteria
15. Re-evaluation of the Prospective-Incorporation-by-Reference of the Maximum Contaminant Levels
16. Delta Nutrient Research Plan
17. Comprehensive Pesticides Control Program
18. Pyrethroid Research Plan
19. Central Valley Rivers Mercury Control Program
20. Delta Mercury Control Program
21. Watershed-based Plan Implementation and Update for Battle Creek
22. Reassessment of Beneficial Uses and Water Quality Objectives in Specific Reaches of the Pit River
23. Implementation of Clear Lake Nutrient Control Program
24. Development of Procedures to Define and Determine Naturally-Occurring Background Conditions
25. Evaluation of Selenium Criteria's Protectiveness of Beneficial Uses
26. Addressing Water Quality Issues Associated with Trash and Pathogens in the City of Stockton, the San Joaquin River Basin and the Sacramento-San Joaquin River Delta
27. Addressing Harmful Algal Blooms in City of Stockton Waters
28. Reviewing and Clarifying the Beneficial Uses and Monitoring in the California Aqueduct
29. Designate RARE, GWR, and FRSH Beneficial Uses for Waterbodies in the Sacramento River Basin and San Joaquin River Basin
30. Designate Outstanding National Resource Waters for Medicine Lake Volcanic Basin and Fall River Springs

Four new proposed projects were developed to help address the issues identified in

comments submitted to the Central Valley Water Board during the solicitation period. The projects are listed in **Table 3**. In addition to new projects, commenters also submitted requests for revisions to existing projects. These revisions are subject to change based on public comments received and Board review and are summarized in the factsheets in Appendix I.

Table 3: Proposed Projects to Address Basin Planning Issues Identified During the 2024 Joint Triennial Review

Project Number	Project Name	Sacramento River – San Joaquin River Basin	Tulare Lake Basin
31	Basin Plan Updates to Incorporate Racial Equity References and Information	X	X
32	De-Designation Zone and Site-Specific Objectives Evaluation of Keswick Reservoir	X	
33	Designate Beneficial Uses of RARE and BIOL for Waterbodies in the Tulare Lake Basin		X
34	Evaluation and Designation for COMM	X	X

V. CENTRAL VALLEY WATER BOARD CORE BASIN PLANNING AND TOTAL MAXIMUM DAILY LOAD PROGRAM WORK

Board staff have core planning work that is ongoing throughout the year. It includes work related to statewide plans and policies, as well as routine Basin Planning tasks such as non-regulatory updates to the Basin Plans and initiation of subsequent Triennial Reviews. The effort required for this core work can be difficult to predict as statewide priorities change. Additionally, the Total Maximum Daily Load (TMDL) Program also conducts core planning work at the Central Valley Water Board and must share the limited resources described in the subsequent section.

VI. BASIN PLANNING AND TOTAL MAXIMUM DAILY LOAD RESOURCES

The Central Valley Water Board has limited resources dedicated to Basin Planning efforts and the TMDL Program. At the time of this writing, resources for these efforts are leveraged between Waste Discharge Permit Fees and federal USEPA funding for a current total of 19 person years (PYs), where a PY equates to the resources needed to fund one Board staff for one year.

The combined Basin Planning resources are utilized to implement the Triennial Review Workplan, which includes activities related to Basin Planning, the TMDL Program, the CV-SALTS initiative, and Delta activities.

VII. PROJECT PRIORITIZATION

To efficiently use Board resources, Board staff categorized the 34 proposed projects identified as part of this 2024 Triennial Review Workplan using the project prioritization criteria (Table 1) and the ranking categories (Table 2). Projects that represent an existing commitment and/or Board obligation (Rank 1), or projects that have been identified as Special Status (Rank 2) were not assigned criteria. The prioritization process resulted in eight projects categorized in Rank 1; zero projects in Rank 2; 13 projects in Rank 3; six projects in Rank 4; and five projects in Rank 5. Two projects are unranked as they are being considered for removal from the list of projects (See below).

Should the Board decide that projects in Ranks 1, 2, and 3 that have existing staff resource allocations are no longer a high-priority, resource availability for new projects may increase, allowing for other ranked projects to be prioritized to receive Board staff allocations. Tables 4, 5, and 6, found on the following pages summarize Board staff's recommended prioritization and ranking based on current staff resources.

Board staff reviewed the projects from the 2021 Triennial Review to determine if any could be removed from the 2024 Triennial Review Project List. The following projects are being considered for removal in the 2024 Triennial Review Project List:

- Project 13: Ammonia Water Quality Objectives
- Project 14: Review of Proposed USEPA Water Quality Criteria and 304(a) Criteria

If the Board agrees with the Board staff recommendation to remove these projects, the remaining projects will be renumbered accordingly.

VIII. NEXT STEPS

Following Board adoption of the 2024 Triennial Review Workplan, Board staff will prioritize Basin Planning resources as part of the annual Portfolio Management work planning process to implement projects identified in Ranks 1 and 2 and some projects within Rank 3. As projects are completed, Board staff will begin work on other ranked projects as resources allow. Project rankings outlined in this Workplan are based on

current Basin Planning resources. Should the allotted resources change, Board staff will reassess staff resource commitments accordingly through the Portfolio Management process.

Under the Portfolio Management Process, proposed program priorities are discussed with the Central Valley Water Board at the last board meeting of the calendar year (usually December). During this meeting, the Board has input on the annual priorities, which are used to craft the following year's annual program workplan. The annual workplan includes items such as resource allocation, priority projects, milestones, and performance measures for priority projects and core program activities. By this process, the Board will have input into which of the highest priority Basin Planning projects are implemented each year.

There is also an annual update to the Board required under the Portfolio Management Process. This update is scheduled for the first meeting following the close of the fiscal year (usually in August). During the annual update, the Board receives information on each program and is provided fact sheets that describe progress on priority projects.

Table 4: Project Prioritization Summary Table¹

Project No.	Project Name	Tribal Interests/ Human Right to Water	Efficient Use of Board or Public Resources	Addresses Impediments to Water Recycling/ Efficient Use/Integrated Waste Management	Complements Prior Work	Special Stakeholder Interest	Addresses 303(d) Water Quality Impairment or Threat to Impairment	Supports Board Climate Change Efforts
1	Support for Basin Planning and Implementation Activities Related to the Salt and Nitrate Control Program							
2	Tribal Beneficial Uses							
3	Guidance for Seasonal Beneficial Uses and Diurnal Variations					X		
4	MUN and AGR in Oil Production Zones		X	X	X	X		
5	Grower-proposed Basin Plan Amendment Work Plans Submitted under Irrigated Lands General Waste Discharge Requirements				X	X		

¹ Grayed out rows represent projects that are not assigned criteria because they are either an existing commitment and the Board is obligated to complete them, or it has been identified as a Special Status project.

Table 4: Project Prioritization Summary Table (Continued)

Project No.	Project Name	Tribal Interests/ Human Right to Water	Efficient Use of Board or Public Resources	Addresses Impediments to Water Recycling/ Efficient Use/Integrated Waste Management	Complements Prior Work	Special Stakeholder Interest	Addresses 303(d) Water Quality Impairment or Threat to Impairment	Supports Board Climate Change Efforts
6	Individual Beneficial Use Evaluation for West Squaw Creek				X		X	
7	Individual Beneficial Use Evaluation for Grassland Water Supply Channels					X		
8	Individual Beneficial Use Evaluation for Groundwater beneath Sulphur Bank Mine in Lake County	X			X	X	X	
9	Appropriate Aquatic Life Beneficial Use Designations in Agriculturally-Dominated Water Bodies and Agricultural Conveyance Facilities		X	X	X	X		X

Table 4: Project Prioritization Summary Table (Continued)

Project No.	Project Name	Tribal Interests/ Human Right to Water	Efficient Use of Board or Public Resources	Addresses Impediments to Water Recycling/ Efficient Use/Integrated Waste Management	Complements Prior Work	Special Stakeholder Interest	Addresses 303(d) Water Quality Impairment or Threat to Impairment	Supports Board Climate Change Efforts
10	Evaluation of Effluent-Dominated and Individual Waterbodies Dominated by NPDES Discharges			X		X		
11	Temperature Criteria and Objectives		X		X	X	X	X
12	Dissolved Oxygen Objectives				X		X	
13	Ammonia Water Quality Objectives	Recommended for Removal						
14	Review of Proposed USEPA Water Quality Criteria and 304(a) Criteria	Recommended for Removal						

Table 4: Project Prioritization Summary Table (Continued)

Project No.	Project Name	Tribal Interests/ Human Right to Water	Efficient Use of Board or Public Resources	Addresses Impediments to Water Recycling/ Efficient Use/Integrated Waste Management	Complements Prior Work	Special Stakeholder Interest	Addresses 303(d) Water Quality Impairment or Threat to Impairment	Supports Board Climate Change Efforts
15	Re-evaluation of the Prospective-Incorporation-by-Reference of the Maximum Contaminant Levels		X			X		
16	Delta Nutrient Research Plan							
17	Comprehensive Pesticides Control Program	X	X		X	X	X	
18	Pyrethroid Research Plan							
19	Central Valley Rivers Mercury Control Program	X			X	X	X	
20	Delta Mercury Control Program							
21	Watershed-Based Plan Implementation and Update for Battle Creek		X		X	X		

Table 4: Project Prioritization Summary Table (Continued)

Project No.	Project Name	Tribal Interests/ Human Right to Water	Efficient Use of Board or Public Resources	Addresses Impediments to Water Recycling/ Efficient Use/Integrated Waste Management	Complements Prior Work	Special Stakeholder Interest	Addresses 303(d) Water Quality Impairment or Threat to Impairment	Supports Board Climate Change Efforts
22	Reassessment of Beneficial Uses and Water Quality Objectives in Specific Reaches of the Pit River	X	X			X		
23	Implementation of the Clear Lake Nutrient Control Program							
24	Development of Procedures to Define and Determine Naturally-Occurring Background Conditions		X			X		X
25	Evaluation of Selenium Criteria's Protectiveness of Beneficial Uses		X		X	X		

Table 4: Project Prioritization Summary Table (Continued)

Project No.	Project Name	Tribal Interests/ Human Right to Water	Efficient Use of Board or Public Resources	Addresses Impediments to Water Recycling/ Efficient Use/Integrated Waste Management	Complements Prior Work	Special Stakeholder Interest	Addresses 303(d) Water Quality Impairment or Threat to Impairment	Supports Board Climate Change Efforts
26	Addressing Water Quality Issues Associated with Trash and Pathogens in the City of Stockton, the San Joaquin River Basin and the Sacramento-San Joaquin River Delta	X	X		X	X	X	
27	Addressing Harmful Algal Blooms in City of Stockton Waters							
28	Reviewing and Clarifying the Beneficial Uses and Monitoring in the California Aqueduct				X	X		
29	Designate RARE, GWR, and FRSH Beneficial Uses for Waterbodies in the Sacramento River Basin and San Joaquin River Basin		X			X		

Table 4: Project Prioritization Summary Table (Continued)

Project No.	Project Name	Tribal Interests/ Human Right to Water	Efficient Use of Board or Public Resources	Addresses Impediments to Water Recycling/ Efficient Use/Integrated Waste Management	Complements Prior Work	Special Stakeholder Interest	Addresses 303(d) Water Quality Impairment or Threat to Impairment	Supports Board Climate Change Efforts
30	Designate Outstanding National Resource Waters for Medicine Lake Volcanic Basin and Fall River Springs	X	X		X	X	X	X
31	Basin Plan Updates to Incorporate Racial Equity References and Information							
32	De-Designation Zone and Site-Specific Objectives Evaluation of Keswick Reservoir						X	
33	Designate Beneficial Uses of RARE and BIOL for Waterbodies in the Tulare Lake Basin	X	X			X		X

Table 4: Project Prioritization Summary Table (Continued)

Project No.	Project Name	Tribal Interests/ Human Right to Water	Efficient Use of Board or Public Resources	Addresses Impediments to Water Recycling/ Efficient Use/Integrated Waste Management	Complements Prior Work	Special Stakeholder Interest	Addresses 303(d) Water Quality Impairment or Threat to Impairment	Supports Board Climate Change Efforts
34	Evaluation and Designation for COMM					X		

Table 5A: Project Ranking Summary Table

Project No.	Project Name	Project Rank
1	Support for Basin Planning and Implementation Activities Related to the Salt and Nitrate Control Program	Rank 1: Existing Commitments
2	Tribal Beneficial Uses	Rank 1: Existing Commitments
3	Guidance for Seasonal Beneficial Uses and Diurnal Variations	Rank 5: Meets 1 Criterion
4	MUN and AGR in Oil Production Zones	Rank 3: Meets \geq 3 Criteria
5	Grower-proposed Basin Plan Amendment Work Plans Submitted under Irrigated Lands General Waste Discharge Requirements	Rank 4: Meets 2 Criteria
6	Individual Beneficial Use Evaluation for West Squaw Creek	Rank 4: Meets 2 Criteria
7	Individual Beneficial Use Evaluation for Grassland Water Supply Channels	Rank 5: Meets 1 Criterion
8	Individual Beneficial Use Evaluation for Groundwater Beneath Sulphur Bank Mine in Lake County	Rank 3: Meets \geq 3 Criteria
9	Appropriate Aquatic Life Beneficial Use Designations in Agriculturally-dominated Water Bodies and Agricultural Conveyance Facilities	Rank 3: Meets \geq 3 Criteria
10	Evaluation of Effluent-dominated and Individual Waterbodies Dominated by NPDES Discharges	Rank 4: Meets 2 Criteria
11	Temperature Criteria and Objectives	Rank 3: Meets \geq 3 Criteria
12	Dissolved Oxygen Objectives	Rank 4: Meets 2 Criteria
13	Ammonia Water Quality Objectives	Recommended for Removal
14	Review of Proposed USEPA Water Quality Criteria and 304(a) Criteria	Recommended for Removal
15	Re-evaluation of the Prospective- Incorporation-by-Reference of the Maximum Contaminant Levels	Rank 4: Meets 2 Criteria
16	Delta Nutrient Research Plan	Rank 1: Existing Commitments
17	Comprehensive Pesticides Control Program	Rank 3: Meets \geq 3 Criteria
18	Pyrethroid Research Plan	Rank 1: Existing Commitments
19	Central Valley Rivers Mercury Control Program	Rank 3: Meets \geq 3 Criteria
20	Delta Mercury Control Program	Rank 1: Existing Commitments
21	Watershed-based Plan Implementation and Update for Battle Creek	Rank 3: Meets \geq 3 Criteria
22	Reassessment of Beneficial Uses and Water Quality Objectives in Specific Reaches of the Pit River	Rank 3: Meets \geq 3 Criteria
23	Implementation of the Clear Lake Nutrient Control Program	Rank 1: Existing Commitments

Table 5A: Project Ranking Summary Table (Continued)

Project No.	Project Name	Project Rank
24	Development of Procedures to Define and Determine Naturally-occurring Background Conditions	Rank 3: Meets \geq 3 Criteria
25	Evaluation of Selenium Criteria's Protectiveness of Beneficial Uses	Rank 3: Meets \geq 3 Criteria
26	Addressing Water Quality Issues Associated with Trash and Pathogens in the City of Stockton, the San Joaquin River Basin and the Sacramento-San Joaquin River Delta	Rank 3: Meets \geq 3 Criteria
27	Addressing Harmful Algal Blooms in City of Stockton Waters	Rank 1: Existing Commitments
28	Review and Clarify the Beneficial Uses for the California Aqueduct	Rank 5: Meets 1 Criterion
29	Designate RARE, GWR, and FRSH Beneficial Uses for Waterbodies in the Sacramento River Basin and San Joaquin River Basin	Rank 4: Meets 2 Criteria
30	Designate Outstanding National Resource Waters for Medicine Lake Volcanic Basin and Fall River Springs	Rank 3: Meets \geq 3 Criteria
31	Racial Equity Goals for Basin Plan and Total Maximum Daily Loads	Rank 1: Existing Commitments
32	De-Designation Zone and Site-Specific Objectives Evaluation of Keswick Reservoir	Rank 5: Meets 1 Criterion
33	Designate Beneficial Uses of RARE and BIOL for Waterbodies in the Tulare Lake Basin	Rank 3: Meets \geq 3 Criteria
34	Evaluation and Designation for COMM	Rank 5: Meets 1 Criterion

Table 5B: Project Ranking Summary Table²

Rank	Projects	Total
1	1 Support for Basin Planning and Implementation Activities Related to the Salt and Nitrate Control Program 2 Tribal Beneficial Uses 16 Delta Nutrient Research Plan 18 Pyrethroid Research Plan 20 Delta Mercury Control Program 23 Implementation of the Clear Lake Nutrient Control Program 27 Addressing Harmful Algal Blooms in City of Stockton Waters 31 Racial Equity Goals for Basin Plan and Total Maximum Daily Loads from the FY23/24 Workplan	8
2		0
3	4 MUN and AGR in Oil Production Zones 8 Individual Beneficial Use Evaluation for Groundwater Beneath Sulphur Bank Mine in Lake County 9 Appropriate Aquatic Life Beneficial Use Designations in Agriculturally-dominated Waterbodies and Agricultural Conveyance Facilities 11 Temperature Criteria and Objectives 17 Comprehensive Pesticides Control Program 19 Central Valley Rivers Mercury Control Program 21 Watershed-based Plan Implementation and Update for Battle Creek 22 Reassessment of Beneficial Uses and Water Quality Objectives in Specific Reaches of the Pit River 24 Development of Procedures to Define and Determine Naturally-occurring Background Conditions 25 Evaluation of Selenium Criteria's Protectiveness of Beneficial Uses 26 Addressing Water Quality Issues Associated with Trash and Pathogens in the City of Stockton, the San Joaquin River Basin and the Sacramento-San Joaquin River Delta 30 Designate Outstanding National Resource Waters for Medicine Lake Volcanic Basin and Fall River Springs 33 Designate Beneficial Uses of RARE and BIOL for Waterbodies in the Tulare Lake Basin	13

²Listings are in numerical order by project number and do not imply a prioritization within each rank.

Table 5B: Project Ranking Summary Table² (Continued)

Rank	Projects	Total
4	5 Grower-proposed Basin Plan Amendment Work Plans Submitted under Irrigated Lands General Waste Discharge Requirements 6 Individual Beneficial Use Evaluation for West Squaw Creek 10 Evaluation of Effluent-dominated and Individual Waterbodies Dominated by NPDES Discharges 12 Dissolved Oxygen Objectives 15 Re-evaluation of the Prospective-Incorporation-by-Reference of the Maximum Contaminant Levels 29 Designate RARE, GWR, and FRSH Beneficial Uses for Waterbodies in the Sacramento River Basin and San Joaquin River Basin	6
5	3 Guidance for Seasonal Beneficial Uses and Diurnal Variations 7 Individual Beneficial Use Evaluation for Grassland Water Supply Channels 28 Review and Clarify the Beneficial Uses for the California Aqueduct 32 De-Designation Zone and Site-Specific Objectives Evaluation of Keswick Reservoir 34 Evaluation and Designation for COMM	5

²Listings are in numerical order by project number and do not imply a prioritization within each rank.

**APPENDIX 1:
2024 TRIENNIAL REVIEW PROJECT FACT SHEETS**

Project 1 – Support for Basin Planning and Implementation Activities Related to the Salt and Nitrate Control Program

Watershed:

Sacramento River/San Joaquin River Basins Tulare Lake Basin

2024 Comment Letters Received:

Valley Water Management Company

2021 Comment Letters Received:

Restore the Delta

Valley Water Management Company

North Coast Rivers Alliance

Pacific Gold Agriculture

Other Public Interest:

Past Board Commitment:

Resolution R5-2020-0057 (Revisions to the Amendments to the Water Quality Control Plans for the Sacramento River and San Joaquin River Basins and the Tulare Lake Basin to Incorporate a Central Valley-Wide Salt and Nitrate Control Program)

Resolution R5-2018-0034 (Amendments to the Water Quality Control Plans for the Sacramento River and San Joaquin River Basins and the Tulare Lake Basin to incorporate a Central Valley-Wide Salt and Nitrate Control Program)

Project's Triennial Review History:

Rank 2 Project (Special Status) in 2021 Triennial Review Workplan

Rank 2 Project (Special Status) in 2018 Triennial Review Workplan

Project Description:

Elevated levels of salinity and nitrates in surface waters and groundwater are an increasing problem in California's Central Valley. High nitrate concentrations in groundwater impair or threaten the region's drinking water quality. Salt accumulations in the soil have resulted in the removal of large portions of farmland from agricultural production. The adopted and approved Central Valley Salt and Nitrate Control Program (SNCP) is designed to address both legacy and ongoing salt and nitrate accumulation issues in surface water and groundwater throughout the basin. The Central Valley Water Board approved the SNCP Basin Plan Amendments (BPAs) and accompanying Staff Report on 31 May 2018 (Resolution R5-2018-0034). The SNCP BPAs were approved by the State Water Board in October 2019. The approving resolution (2019-0057) directed that targeted revisions be incorporated into the SNCP BPAs by January 2021. The SNCP BPAs were approved by the Office of Administrative Law (OAL) on 15 January 2020 and approved by the USEPA on 2 November 2020.

The Central Valley Water Board revised the SNCP BPAs accordingly, including Central Valley Water Board clarification revisions and removal of provisions disapproved of by

the USEPA. The Central Valley Water Board adopted the revised SNCP BPAs and accompanying Staff Report on 10 December 2020, with Resolution R5-2020-0057. The revised SNCP BPAs were approved by the State Water Board on 1 June 2021 with Resolution No. 2021-0019 and approved by OAL on 10 November 2021. USEPA sent a letter to the Central Valley Water Board on 15 March 2022 acknowledging that the revised BPAs removed the provisions they disapproved of.

The SNCP salinity and nitrate permitting strategies each contain two compliance pathways with associated implementation schedules that permittees and the Central Valley Water Board must adhere to.

The nitrate portion of the SNCP is a prioritized program that applies to groundwater, while the salinity portion is a phased program that applies to surface waters and groundwater. As such, the SNCP will impact several thousand permittees across most regulatory programs at the Central Valley Water Board. Board staff resources are needed to manage the issuance of Notices to Comply (NTCs) and track permittee responses in the Notices of Intent (NOIs), and other implementation deliverables for both the salt and nitrate portions of the program.

Nitrate Control Program:

The NTCs for the Nitrate Control Program were sent out to Priority 1 permittees on 29 May 2020. Since that time, six Management Zones have formed to encompass the six high priority sub-basins. The Priority 1 Management Zones submitted Preliminary Management Zone Proposals (PMZPs) and Early Action Plans (EAPs) on 8 March 2021 to comply with the Nitrate Control Program. The Central Valley Water Board sent response letters to the Management Zones regarding EAP submittals and PMZPs on 7 May 2021 and 28 February 2022, respectively. On 29 August 2022, Management Zones in the Priority 1 basins submitted Final Management Zone Proposals (FMZPs) (including Final EAPs) to the Central Valley Water Board. Concurrence Letters for the FMZPs and Final EAPs were sent to the Management Zones on 23 February 2023. In addition, Management Zone Implementation Plans (MZIPs) were submitted to the Central Valley Water Board on 5 September 2023. The Central Valley Water Board sent response letters regarding the MZIPs on 20 November 2023.

NOIs from Priority 1 permittees not listed as management zone participants were also due 7 May 2021. Response letters were sent the Priority 1 permittees that selected the individual approach (Path A) in January 2024.

NTCs were sent to Priority 2 permittees on 29 December 2023. PMZPs and EAPs for the developing Priority 2 Management Zones are due on 28 December 2024. NOIs are due by 26 February 2025.

Salt Control Program:

NTCs for the Salt Control Program were sent out on 5 January 2021. NOI forms were

due on 15 July 2021. The Prioritization and Optimization (P&O) Study Work Plan was approved by the Central Valley Water Board in March 2021 and implementation of the P&O Study began in December 2021.

Part 1 of the Baseline Characterization Report was drafted in December 2022 and reviewed by the Central Valley Water Board. A Beneficial Use Literature Review was completed in May 2023. The draft Part 2 of the Baseline Characterization Report was completed in October 2023 and reviewed by the Central Valley Water Board.

SNCP Surveillance and Monitoring Program:

Between November 2022 and January 2023, Central Valley Water Board Executives and Staff attended multiple meetings to discuss the Surveillance and Monitoring Program (SAMP) for the SNCP. On 17 November 2022, 20 December 2022, and 20 January 2023 the Central Valley Water Board reviewed and provided comments for different versions of the Draft SAMP Workplan/ Quality Assurance Project Plan (QAPP). The Central Valley Salinity Coalition SAMP Workplan for the SNCP (submitted 11 February 2023) was approved by the Central Valley Water Board on 23 March 2023.

Project 2 – Tribal Beneficial Uses

Watershed:

Region-wide

2024 Comment Letters Received:

Save California Salmon
Pacific Coast Federation of Fishermen's Associations
Institute for Fisheries Resources

2021 Comment Letters Received:

Restore the Delta

Other Public Interest:**Past Board Commitment:****Project's Triennial Review History:**

Rank 3 Project (Meets \geq 3 Criteria) in 2021 Triennial Review Workplan
Rank 3 Project (Meets \geq 3 Criteria) in 2018 Triennial Review Workplan

Project Description:

Beneficial use definitions relating to California Native American tribes were established by the State Water Board in 2017 through Resolution 2017-0027 which adopted Part 2 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California—Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions. The new beneficial use definitions are Tribal Tradition and Culture (CUL), and Tribal Subsistence Fishing (T-SUB). In addition, the State Water Board also defined a beneficial use for Subsistence Fishing (SUB). The SUB, T-SUB and Commercial and Sportfishing (COMM) beneficial uses relate to the risks to human health from the consumption of noncommercial fish or shellfish. In addition, the definition for CUL also includes consumption of aquatic resources to support cultural, spiritual, ceremonial and traditional rights.

The two subsistence fishing beneficial uses normally involve higher rates of consumption of fish or shellfish than those protected under the COMM and CUL beneficial uses. The function of the CUL, T-SUB and SUB beneficial uses are not to protect or enhance fish populations or aquatic habitats. Fish populations and aquatic habitats are protected and enhanced by other beneficial uses, including but not limited to Fish Spawning, Migration of Aquatic Organisms, Aquaculture, Warm Freshwater Habitat, and Cold Freshwater Habitat, that are designed to support aquatic habitats for the reproduction or development of fish. The Central Valley has few water bodies that have been designated to be protected for COMM and none, yet that are designated to be protected for CUL, T-SUB or SUB.

In the 2018 Triennial Review cycle several tribes in the Central Valley requested that

the Central Valley Water Board designate tribal beneficial uses.

Board staff developed an approach and process for CUL designation and held a series of meetings in spring 2021 to receive feedback, including two Tribal Summits, a public stakeholder meeting, and an information item at the June 2021 Board Meeting. In 2022, Board staff began to host semi-annual hybrid meetings to provide project updates to Native American Tribes and their representatives as well as to solicit input to incorporate into the Board's approach to designate waterbodies with tribal beneficial uses.

The Central Valley Water Board has begun the process of designating waterbodies in the Central Valley Region for CUL and, subsequently, T-SUB. Board staff developed a basin plan amendment (BPA) to add the TBU definitions to both basin plans. The BPA has been adopted by the Central Valley Water Board and approved by the State Water Resources Control Board and the Office of Administrative Law. The BPA is currently under review with U.S. EPA (the final approval before the BPA becomes effective). Board staff are meeting with tribes who submitted TBU designation requests to review their request, discuss evidence submitted, and provide an opportunity to establish continued collaboration. Meetings will continue to be held and offered to all tribes throughout the TBU designation process.

Project 3 – Guidance for Seasonal Beneficial Uses and Diurnal Variations

Watershed:

Region-wide

2024 Comment Letters Received:

None

2021 Comment Letters Received:

None

Other Public Interest:**Past Board Commitment:**

None

Project's Triennial Review History:

Rank 5 (Meets 1 Criterion) Project in 2021 Triennial Review Workplan

Rank 5 (Meets 1 Criterion) Project in 2018 Triennial Review Workplan

Project Description:

Federal regulations (Title 40 Code of Federal Regulations (CFR) § 131.10(f).) allow states to adopt seasonal uses as an alternative to reclassifying a waterbody or segment thereof to uses requiring less stringent water quality criteria. Beneficial uses, such as aquatic life, recreation, and other uses may only occur during certain seasons in certain water bodies. In those cases, it may be appropriate to recognize the seasonality of the use and refine water quality objectives to protect the uses that are present during each season.

In addition, some surface water bodies are subject to varying water quality that occurs with daylight and nighttime conditions. Two primary causes of diurnal variations are photosynthesis and aerobic respiration from algal or aquatic plants. Parameters that are most often affected are dissolved oxygen pH and specific conductance. A concern was expressed during the Central Valley Water Board development of the 2014 Integrated Report that the water quality objectives did not account for diurnal variability and do not provide reasonable protection of beneficial uses at some sites. However, the commenter anticipated that the Statewide Biostimulatory Substances Project would provide information on what the conditions ought to be.

The concept of seasonal beneficial uses is new to the Central Valley. Before designating an aquatic life or recreational beneficial use, the Board could consider whether the use is appropriate seasonally. It would be helpful to develop guidance for how seasonality will be considered when evaluating appropriate beneficial uses.

For the diurnal variations, Board staff could identify Central Valley water bodies that

have water quality fluctuations that appear to violate the water quality objectives. Board staff could work with stakeholders to investigate these water bodies to determine if the water quality objectives are appropriate or need to be modified. The Statewide Biostimulatory Substances Project (currently under development) may generate relevant information.

Project 4 – MUN and AGR in Oil Production Zones

Watershed:

Tulare Lake Basin

2024 Comment Letters Received:

Valley Water Management Company

2021 Comment Letters Received:

Valley Water Management Company

Other Public Interest:**Past Board Commitment:**

R5-2017-0036 (Waste Discharge Requirements General Order for Oil Field Discharges to Land – General Order Number Three)

Project's Triennial Review History:

Rank 3 (Meets ≥ 3 Criteria) Project in 2021 Triennial Review Workplan

Rank 3 (Meets ≥ 3 Criteria) Project in 2018 Triennial Review Workplan

Referenced in 2014 Triennial Review Workplan

Project Description:

Project Initiated Due to [General Order No. R5-2017-0036](https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2017-0036)

([https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2017-0036.pdf](https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2017-0036)).

Waste Discharge Requirements General Order For Oil Field Discharges to Land, General Order Number Three, Order No. R5-2017-0036 provides coverage for the discharge of oil field produced wastewater to land where the first encountered groundwater is of poor quality that it does not support beneficial uses designated in the Basin Plan, or there is no first encountered groundwater. The order applies to discharges to pond(s) that began prior to 26 November 2014. Dischargers under this General Order must demonstrate that either no groundwater beneath the discharge exists or the groundwater beneath the discharge is of poor quality and that the beneficial uses as defined in the Basin Plan are eligible for de-designation. The discharger must also demonstrate that its discharges will not migrate from the areas where the beneficial uses will be de-designated into areas of higher quality groundwater. Applications for over 40 facilities have been submitted for coverage under this General Order. Dischargers in close proximity to each other and with similar hydrogeological conditions are encouraged to participate in a regional or group effort to provide technical information necessary that demonstrates coverage under the General Order is appropriate and to obtain Basin Plan amendments for de-designation of MUN and AGR beneficial uses, if applicable.

There are several ongoing efforts within this project. A Basin Plan Amendment (BPA)

was adopted by the Central Valley Water Board (Resolution R5-2022-0035) on 10 June 2022 and approved by the State Water Board (Resolution 2023-0040) on 7 November 2023 which amended the Tulare Lake Basin Plan to remove the Municipal and Domestic Supply (MUN) and Agricultural Supply (AGR) beneficial uses from groundwater within a designated horizontal and vertical portion of the southern region of the Lost Hills Oilfield. This BPA is now being prepared for submittal to the Office of Administrative Law for approval.

Additionally, Board staff have initiated the process for amending the Tulare Lake Basin Plan to remove the MUN and AGR beneficial uses from groundwater within a designated region below oil fields that are located north of the town of McKittrick. A CEQA scoping meeting occurred on 25 May 2023 for this BPA. Board staff are currently writing the Staff Report to support this BPA.

Board staff reviewed a technical report from the California Independent Petroleum Association (CIPA) to support a proposal for an evaluation for the potential removal of MUN and AGR beneficial uses from groundwater within a designated region below a portion of several oil fields with discharges regulated by General Order Three. Board staff met with CIPA and requested revisions and additional information to be included in a revised version of the technical report. The revised report is currently being developed.

This factsheet covers multiple projects that Board staff work on. While the Board is under a legally-enforceable order to evaluate de-designation of oil fields north of the town of McKittrick, this is not an umbrella order for all projects that fall under this factsheet.

Project 5 – Grower-proposed Basin Plan Amendment Work Plans Submitted under Irrigated Lands General Waste Discharge Requirements

Watershed:

Region-wide

2024 Comment Letters Received:

None

2021 Comment Letters Received:

None

Other Public Interest:

Past Board Commitment:

Project's Triennial Review History:

Rank 4 (Meets 2 Criteria) Project in 2021 Triennial Review Workplan

Rank 4 (Meets 2 Criteria) Project in 2018 Triennial Review Workplan

Project Description:

The General Waste Discharge Requirements (WDR) recognize that some areas within the Tulare Lake Basin and San Joaquin Basin areas overlie groundwater containing naturally occurring constituents, including salts, that may exceed water quality objectives associated with certain beneficial use designations. In such cases, the use may be unattainable, even in the absence of any waste discharge, and de-designation or modification of the designated use may be appropriate. The Irrigated Lands Regulatory Program General Orders (Orders) allow dischargers to temporarily operate under reduced monitoring and reporting requirements when 1) a third-party entity, board, or other group is actively pursuing a Basin Plan amendment (BPA) to de-designate or modify the beneficial use; and 2) the third-party provides the required information indicating that it is reasonably likely that the beneficial use is not appropriate in the area of the proposed de-designation. To date, two BPA Workplans have been received pursuant to the Orders, one each in the Tulare Lake Basin and the San Joaquin River Basin.

Project 6 – Individual Beneficial Use Evaluation for West Squaw Creek

Watershed:

Sacramento River

2024 Comment Letters Received:

None

2021 Comment Letters Received:

None

Other Public Interest:

Past Board Commitment:

R5-2004-0090 (Amending the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins to Modify the Beneficial Uses for Freshwater Aquatic Habitat (WARM and COLD) and Remove Spawning (SPWN) for West Squaw Creek, Shasta County)

Project's Triennial Review History:

Rank 5 (Meets 1 Criterion) Project in 2021 Triennial Review Workplan

Rank 5 (Meets 1 Criterion) Project in 2018 Triennial Review Workplan

Referenced in the Triennial Review Workplans for: 2005, 2011, and 2014

Project Description:

Stakeholders have indicated that there is information that supports reviewing specific beneficial uses of the water bodies. West Squaw Creek, tributary to Lake Shasta, has been significantly impacted by copper mining in the watershed. The Mining Program staff have been evaluating the measures that have been implemented to control mine discharges.

Project 7 – Individual Beneficial Use Evaluation for Grassland Watershed Water Supply Channels

Watershed:

Grassland Watershed

2024 Comment Letters Received:

None

2021 Comment Letters Received:

None

Other Public Interest:

Past Board Commitment:

Project's Triennial Review History:

Rank 5 (Meets 1 Criterion) Project in 2021 Triennial Review Workplan

Rank 5 (Meets 1 Criterion) Project in 2018 Triennial Review Workplan

Referenced in the Triennial Review Workplans for 2011 and 2014

Project Description:

Stakeholders have indicated that there is information that supports reviewing specific beneficial uses of the water bodies. The Grassland water supply channels are not currently designated as having existing REC-1 or REC-2 beneficial uses. This project would evaluate the Grasslands wetland water supply channels to determine if the REC-1 or REC-2 beneficial uses are an appropriate designation.

Project 8 – Individual Beneficial Use Evaluation for Groundwater Beneath the Sulphur Bank Mine in Lake County

Watershed:

Clear Lake Watershed

2024 Comment Letters Received:

None

2021 Comment Letters Received:

None

Other Public Interest:

Past Board Commitment:

Project's Triennial Review History:

Rank 5 (Meets 1 Criterion) Project in 2021 Triennial Review Workplan

Rank 5 (Meets 1 Criterion) Project in 2018 Triennial Review Workplan

Project Description:

Stakeholders have indicated that there is information that supports reviewing specific beneficial uses of the water bodies. De-designation would potentially allow consideration of a broader range of remediation alternatives at the closed mine site, which is regulated by USEPA pursuant to Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Tribal stakeholders oppose beneficial use de-designations in this area.

This project would evaluate the groundwater beneficial uses beneath the Sulphur Bank Mine in Lake County to determine if the municipal and domestic water supply beneficial use designation is appropriate.

Project 9 – Appropriate Aquatic Life Beneficial Use Designations in Agriculturally-Dominated Water Bodies and Agricultural Conveyance Facilities

Watershed:

Region-wide

2024 Comment Letters Received:

Sacramento River Source Water Protection Program

American River Source Water Protection Program

California Valley Clean Water Association

2021 Comment Letters Received:

Central Valley Clean Water Association

Other Public Interest:**Past Board Commitment:**

R5-2017-0088 (Amendments to the Water Quality Control Plans for the Sacramento River and San Joaquin River Basins and Tulare Lake Basin to Establish a Region-wide Municipal and Domestic Supply (MUN) Beneficial Use Evaluation Process in Agriculturally Dominated Surface Water Bodies and to Remove the MUN Beneficial Use from 231 Constructed or Modified Ag Drains in the San Luis Canal Company District)

Project's Triennial Review History:

Rank 3 (Meets \geq 3 Criteria) Project in the 2021 Triennial Review Workplan

Rank 3 (Meets \geq 3 Criteria) Project in the 2018 Triennial Review Workplan

Included in the 2014, 2011, 2005, 2002, 1998 Triennial Review Workplans

Project Description:

In agricultural environments, a complex network of modified natural and constructed channels conveys irrigation supplies to farms and export agricultural drainage water to natural streams. Many of these waterways lack habitat and physical flow characteristics to sustain the full range of aquatic life and other beneficial uses. In 1992, Board staff collected information from local water agencies identifying natural waterbodies that were dominated by agricultural drainage, waterbodies constructed to carry agricultural drainage and/or supply water, and waterbodies that were natural dry washes that were altered to carry agricultural supply and/or drainage. The local water agencies also provided information on the lengths of these waterbodies.

Some of these waterbodies were deliberately modified for the purpose of providing support to the agricultural industry. During previous Triennial Reviews, stakeholders commented that fully protecting the assigned beneficial uses would result in loss of the agricultural functionality of the waterbody. Therefore, stakeholders requested that the Central Valley Water Board develop plans and policies that recognize that the functionality of the modified waterbody should take precedence over any perceived

beneficial uses. The State Water Board developed recommendations for providing reasonable protection for beneficial uses of agricultural waters in a 1995 Agricultural Waters Task Force report and some of these recommendations may provide an approach to addressing stakeholder concerns.

On 11 August 2017, the Central Valley Water Board adopted Resolution R5-2017-0088. The Resolution adopted a region-wide process for evaluating the MUN beneficial use in these agriculturally-dominated waterbodies. A State Water Board Meeting to consider approval of the Basin Plan Amendment was held on 10 July 2018. State Water Board members deferred their decision on the Amendment to a future date. This project would evaluate the existing ecologic functionality of these waterbodies and would assess aquatic life beneficial use protections and designations within these waterbodies.

Board staff will review the previous Basin Plan Amendment and other relevant documents, as well as coordinate internally and with the State Water Board to develop a plan to revise the Basin Plan Amendment. As with all Basin Plan amendments, all revisions will be subject to regulations requiring public and tribal engagement, review, and opportunity to comment.

More information on the [Municipal and Domestic Supply \(MUN\) Beneficial Use Project](#) can be found at:

(https://www.waterboards.ca.gov/centralvalley/water_issues/salinity/mun_beneficial_use/).

Project 10 – Evaluation of Effluent-Dominated and Individual Water Bodies Dominated by NPDES Discharges

Watershed:

Region-wide

2024 Comment Letters Received:

None

2021 Comment Letters Received:

None

Other Public Interest:**Past Board Commitment:****Project's Triennial Review History:**

Rank 4 (Meets 2 Criteria) Project in the 2021 Triennial Review Workplan

Rank 4 (Meets 2 Criteria) Project in the 2018 Triennial Review Workplan

Referenced in the 1998, 2002, 2005, 2011, and 2014 Triennial Review Workplans

Project Description:

It is sometimes difficult and expensive for dischargers to meet water quality objectives in waterbodies dominated by surface water discharges, also known as effluent dominated waterbodies (EDWs). Where little or no dilution is available, effluent limits are set at the applicable water quality criterion/objective which may be more stringent than drinking water maximum contaminant levels (MCLs) to protect aquatic life beneficial uses. Beneficial uses in EDWs have generally been designated through broad policies and have not generally been subject to use attainability analyses to determine appropriate uses.

The consistent flows provided by the wastewater discharge may enhance some aquatic life beneficial uses but be detrimental to others that depend on the ephemeral nature of the stream (i.e. cause a shift from the uses of ephemeral waters to the uses of perennial waters). There are questions of whether the discharger should be required to fully protect these shifted uses when it is the discharge itself that allows the modified uses to exist. There are also questions regarding the fate of the original uses that are lost due to the discharge.

Stakeholders have suggested that the assigned beneficial uses of these water bodies are inappropriate and have requested that various alternatives be explored for assigning beneficial uses to EDWs.

Project 11 – Temperature Criteria and Objectives

Watershed:

Sacramento River and San Joaquin River

2024 Comment Letters Received:

California Department of Fish and Wildlife
Save California Salmon
Pacific Coast Federation of Fishermen's Associations
Institute for Fisheries Resources

2021 Comment Letters Received:

Restore the Delta
The Conservation Groups
San Francisco Baykeeper

Other Public Interest:

Past Board Commitment:

University of California, Santa Cruz Temperature Criteria Contract: Agreement #16-048-150

Project's Triennial Review History:

Rank 3 (Meets \geq 3 Criteria) Project in the 2021 Triennial Review Workplan
Rank 3 (Meets \geq 3 Criteria) Project in the 2018 Triennial Review Workplan
Referenced in the following Triennial Review Workplans: 1998, 2002, 2005, 2011, 2014

Project Description:

The Basin Plans identify waterbodies that require aquatic life protection by designating the following beneficial uses: warm freshwater habitat (WARM), cold freshwater habitat (COLD), fish migration (MIGR) and fish spawning (SPWN). The Basin Plans include water quality objectives for dissolved oxygen and temperature that provide protections for these aquatic life beneficial uses. Stakeholders have indicated that water quality objectives for dissolved oxygen and temperature may need to be re-evaluated to provide appropriate protection of the aquatic life beneficial uses.

The Sacramento River and San Joaquin River Basin Plan has specific numeric temperature objectives for the Sacramento River, Lake Siskiyou and Deer Creek, source to the Cosumnes River. Both Basin Plans also have narrative temperature objectives that specify protection of beneficial uses.

In previous Triennial Reviews, the California Department of Fish and Wildlife requested that temperature objectives be established to provide protection of spring-run Chinook salmon and steelhead in the Sacramento River Basin and fall-run Chinook salmon in the San Joaquin River Basin. USEPA Region 10, which has jurisdiction over the Northwestern United States, issued regional guidance for developing numeric temperature standards for the Pacific Northwest to protect cold water (salmonid)

beneficial uses. While USEPA Region 9, which has jurisdiction over California, has not adopted similar guidance, it is supportive of the scientific approach used in the USEPA Region 10 guidance for development of numeric temperature standards to protect salmonid beneficial uses in the Central Valley. The Department of Fish and Wildlife also supports the use of the USEPA Region 10 guidance to develop numeric temperature objectives. However, there are also comments that the USEPA Region 10 guidance is inappropriate for use in the Central Valley and requests to develop temperature objectives that are specific to the various Central Valley waterways.

Commenters from previous Triennial Reviews also point out that some of the Basin Plans' named waterbodies are very long and have different characteristics from one end to the other end. In many of these cases, these long waterbody reaches are designated both WARM and COLD, and thus protection of aquatic life is based on the COLD criteria, which is generally more stringent. However, this may not be adequately protective of either the warm or cold-water ecosystems. Suggestions include subdividing these reaches to appropriate sizes and designating appropriate beneficial uses for each sub reach, or developing water quality objectives that take into consideration the species that may be present at any particular place or time and, thus, provide seasonality to the water quality objectives.

Board staff continue to coordinate with the State Water Board's Division of Water Rights on temperature studies to address unresolved temperature criteria questions and uncertainties. The State Water Board's Division of Water Rights has contracts with UC Davis and UC Santa Cruz/Southwest Fisheries Science Center to conduct salmonid temperature studies. Board staff participated in quarterly update meetings with Water Rights staff and academic researchers on the temperature study contracts.

Project 12 – Dissolved Oxygen Objectives

Watershed:

Region-wide

2024 Comment Letters Received:

None

2021 Comment Letters Received:

Restore the Delta

San Francisco Baykeeper

Other Public Interest:**Past Board Commitment:****Project's Triennial Review History:**

Rank 1 (Existing Commitments) Project in 2021 Triennial Review Workplan

Rank 1 (Existing Commitments) Project in 2018 Triennial Review Workplan

Referenced in the 1998, 2002, 2005, 2011, and 2014 Triennial Review Workplans

Project Description:

The Basin Plans identify water bodies that require aquatic life protection by designating the following beneficial uses: warm freshwater habitat (WARM), cold freshwater habitat (COLD), fish migration (MIGR) and fish spawning (SPWN). The Basin Plans include water quality objectives for dissolved oxygen and temperature that provide protections for these aquatic life beneficial uses. Stakeholders have indicated that water quality objectives for dissolved oxygen and temperature may need to be re-evaluated to provide appropriate protection of the aquatic life beneficial uses. [See the factsheet for Project 11 for development of temperature criteria and objectives.]

The Basin Plans include: (1) general dissolved oxygen objectives that apply to all water bodies designated as supporting WARM, COLD and SPWN; and (2) site-specific objectives for certain water bodies that are typically higher than the general objectives. Both general and site-specific objectives are applied as minimum levels that are to be equaled or exceeded at all times. These objectives have existed in the Basin Plan since its original adoption in 1975. In 1986, the USEPA developed ambient water quality criteria for dissolved oxygen. The recommended national criteria have not been evaluated for use in the Central Valley.

This project involves assessing current dissolved oxygen-impaired waterbodies within the Central Valley Region. For impaired waterbodies not currently monitored, Board staff would need to collect new, continuous monitoring data. For sites that have continuous monitoring data and dissolved oxygen objectives are not currently being met, Board staff would develop improved implementation guidance for the current objectives, which could include amending averaging periods and reviewing the USEPA

ambient water quality criteria for dissolved oxygen.

Future iterations of this project could include reviewing the objectives and developing site-specific dissolved oxygen objectives for the Sacramento-San Joaquin Delta, the Lower Stanislaus River, and the Old and Middle Rivers.

Project 13 – Ammonia Water Quality Objectives

Watershed:

Region-wide

2024 Comment Letters Received:

None

2021 Comment Letters Received:

USEPA Region 9

Other Public Interest:

Central Valley Clean Water Association

Past Board Commitment:**Project's Triennial Review History:**

Rank 3 (Meets \geq 3 Criteria) Project in 2021 Triennial Review Workplan

Rank 3 (Meets \geq 3 Criteria) Project in 2018 Triennial Review Workplan

Project Description:

The Porter-Cologne Water Quality Control Act requires the Water Boards to develop water quality objectives for the reasonable protection of beneficial uses in surface water and a program of implementation for achieving water quality objectives. Federal regulations require States to adopt narrative or numeric water quality criteria to protect designated beneficial uses. (40 CFR § 131.11(a)(1).) Federal regulations require that states consider establishing water quality criteria based on criteria that USEPA publishes under Clean Water Act section 304(a) (40 CFR § 131.11 and 131.20).

Ammonia is discharged to surface water and is a critical pollutant that due to its potential adverse impact on aquatic life, causing lower reproduction, growth, or death to the aquatic organisms at concentrations of concern. The Central Valley Water Board has adopted numeric criteria for unionized ammonia (NH₃) for the Tulare Lake Basin that generally protects beneficial uses but has not adopted numeric ammonia criteria into water quality standards for the Sacramento and San Joaquin River Basins of the Central Valley. The Central Valley Water Board has adopted narrative water quality criteria for toxicity that prohibit the discharge of substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. To interpret these narrative criteria, the Central Valley Water Board relies on recommendations from federal and state agencies as well as peer-reviewed scientific studies. The Central Valley Water Board previously used water quality criteria based on criteria that USEPA publishes under Clean Water Act section 304(a), which is the National Recommended Water Quality Criteria developed in 1999 for ammonia.

In 2013 the USEPA updated the 1999 ammonia criteria for the protection of aquatic life from the toxic effects of ammonia in freshwater. The 2013 ammonia criteria vary based

on pH and temperature and reflect the latest scientific knowledge on the toxicity of ammonia to freshwater aquatic life, including new data on sensitive freshwater mussels and gill-breathing snails. Therefore, the 2013 freshwater acute and chronic aquatic life criteria for ammonia are more protective for the aquatic community than the 1999 ammonia criteria.

USEPA recommended a single national acute and a single national chronic criterion be applied to all waters rather than different criteria based on the presence or absence of mussels.

However, these freshwater mussel species included in the 2013 ammonia criteria are different than the freshwater mussel species in the Central Valley Region. The water quality standards regulation at 40 CFR § 131.11(b)(1)(ii) provides states with the opportunity to adopt water quality criteria that are "...modified to reflect site-specific conditions." As with any criteria, site-specific criteria must be based on a sound scientific rationale in order to protect the designated use and are subject to review and approval or disapproval by USEPA. The 2013 ammonia criteria provide recalculation procedures for site-specific criteria derivation. In the case of ammonia, where a state can demonstrate that mussels are not present on a site-specific basis, the recalculation procedure may be used to remove the mussel species from the national criteria dataset to better represent the species present at the site.

Board staff worked with the Central Valley Clean Water Association (CVCWA) to review their data to establish numeric ammonia water quality objectives for the Central Valley to provide reasonable protection of the aquatic life in the region and to provide a consistent process for its regulatory programs.

CVCWA organized a coordinated effort for publicly-owned treatment works (POTWs) within the Central Valley Region, the Freshwater Mussel Collaborative Study for Wastewater Treatment Plants, to determine how the latest scientific knowledge on the toxicity of ammonia reflected in the 2013 ammonia criteria could be implemented in the Central Valley Region. Phase I, completed in June 2015, included a State of Knowledge Report developed by a consultant team consisting of Robertson-Bryan, Inc., Larry Walker Associates, and Pacific EcoRisk. The collaborative study involved policy and permitting discussions among representatives from the Central Valley Water Board, USEPA, United States Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and regional mussel experts regarding the implementation of the 2013 ammonia criteria in POTW NPDES permits. The discussions evaluated permitting approaches that provide reasonable protection of aquatic life beneficial uses, including protection of freshwater mussels.

The State of Knowledge Report explained that the species of freshwater mussels in waters within the Central Valley Region are different than the species USEPA used in the toxicity dataset for development of the 2013 ammonia criteria. The State of Knowledge Report indicated that one resident freshwater mussel species was shown to be less sensitive than the eastern mussel species used to derive the 2013 Criteria.

However, the sensitivity of the other Central Valley Region mussel species was unknown.

Phase IIc Freshwater Mussel Collaborative Study for Wastewater Treatment Plants: Ammonia Criteria Recalculation Final Report, dated January 2020 (Criteria Recalculation Report) included toxicity studies for the remaining freshwater mussel species present in Central Valley Region waters and demonstrated the resident species are less sensitive than the eastern species used to develop the 2013 ammonia criteria.

The Criteria Recalculation Report utilized toxicity bioassays conducted on resident mussel species to recalculate the ammonia criteria using USEPA's recalculation guidelines [Guidelines for Deriving Numerical Aquatic Site-Specific Water Quality Criteria by Modifying National Criteria (EPA-600/S3-84-099 December 1984) and Revised Deletion Process for the Site-Specific Recalculation Procedure for Aquatic Life Criteria (EPA-823-R-13-001, April 2013)]. Using the toxicity data for the resident mussel species to replace the toxicity data for the eastern mussel species in the national dataset, site-specific ammonia criteria were developed for waters within the Central Valley Region, including all surface waters in the Sacramento River, San Joaquin River, and Tulare Lake Basin Plans.

A draft Criteria Recalculation Report was provided to the Central Valley Water Board, USEPA Region 9, USEPA Office of Science and Technology, USFWS, and the Nature Conservancy. Comments were provided by Board staff and USEPA Office of Science and Technology. USEPA agreed with the recalculation procedure for developing site-specific acute criterion. However, USEPA recommended a more conservative approach for utilizing the acute-to-chronic ratio procedure for developing the site-specific chronic criterion. The final Criteria Recalculation Report addressed the comments and provided revised equations for the chronic criterion.

The site-specific ammonia criteria provided in the January 2020 Criteria Recalculation Report with the adjustments to the chronic criterion recommended by USEPA is being used for the Central Valley Water Board regulatory programs to implement the Basin Plan's narrative toxicity objective to protect aquatic life beneficial uses. The development of the Recalculation Report underwent a vigorous stakeholder development effort with dischargers, resource agencies, academic experts, and discussions with environmental groups. Furthermore, the use of the report in calculation of NPDES permit limits undergoes public review each time a permit is adopted. The calculation method has been used to develop permit limits since 2020 and has been uncontested by the public and regulated community. By implementing the site-specific ammonia criteria provided in the January 2020 Criteria Recalculation Report, with adjustments by USEPA that protect aquatic life beneficial uses, this project is now complete and is being proposed for removal from the 2024 Triennial Review Project List. Board staff welcomes further engagement and will continue public review of ammonia limits as part of the NPDES permitting process.

Project 14 – Review of Proposed USEPA Water Quality Criteria and 304(a) Criteria

Watershed:

Region-wide

2024 Comment Letters Received:

USEPA Region 9

2021 Comment Letters Received:

None

Other Public Interest:

Past Board Commitment:

Project's Triennial Review History:

Rank 5 (Meets 1 Criterion) Project in 2021 Triennial Review Workplan

Rank 5 (Meets 1 Criterion) Project in 2018 Triennial Review Workplan

Referenced in the 2005, 2011, and 2014 Triennial Review Workplans

Project Description:

The Central Valley Water Board is implementing criteria promulgated by the USEPA as of 2000. These criteria are known as the California Toxics Rule (CTR) and include the toxic pollutants (priority pollutants). USEPA also publishes guidance for non-priority pollutants. These non-priority pollutants were not included in the USEPA promulgation of the CTR. USEPA publishes updates of criteria pursuant to Section 304(a) of the Clean Water Act.

The Basin Plans include narrative objectives and a Policy for Application of Water Quality Objectives that indicates that the Central Valley Water Board can use available information, numerical criteria, and guidelines from other authoritative bodies to assist in determining compliance with narrative objectives. This project would involve the evaluation of the applicability of USEPA National Recommended Water Quality Criteria in the Central Valley through a stakeholder-based process.

During the 2024 solicitation period, USEPA Region 9 submitted a comment letter indicating that the Project 14 factsheet did not sufficiently address 40 CFR 131.20(a). USEPA Region 9 staff and Board staff determined that a Project was not required to satisfy this requirement, and that language addressing this requirement should instead be incorporated into the Introduction section (Section I) of this Workplan. Board staff recommend removal of this project from the 2024 Triennial Review Project List.

Project 15 – Re-evaluation of the Prospective-Incorporation-by-Reference of the Maximum Contaminant Levels

Watershed:

Region-wide

2024 Comment Letters Received:

Sacramento River Source Water Protection Program
American River Source Water Protection Program
Valley Water Management Company
California Valley Clean Water Association

2021 Comment Letters Received:

Valley Water Management Company
Central Valley Clean Water Association
Sacramento River Source Water Protection Program

Other Public Interest:

Past Board Commitment:

Project's Triennial Review History:

Rank 4 (Meets 2 Criteria) Project in 2021 Triennial Review Workplan
Rank 4 (Meets 2 Criteria) Project in 2018 Triennial Review Workplan

Project Description:

The Basin Plan identifies MCLs, as tabulated in Title 22, as Water Quality Objectives for both surface and groundwater designated as MUN. This incorporation by reference is prospective, which means that future changes to the MCLs are automatically applicable as water quality objective once the revised regulations take effect.

MCL revisions are made in accordance with Health and Safety Code section 116365. This section requires that the State Water Board consider the following criteria when adopting a primary drinking water standard: 1) the public health goal for the contaminant published by the Office of Environmental Health Hazard Assessment; 2) the national primary drinking water standard for the contaminant, if any, adopted by the United States Environmental Protection Agency; and 3) the technological and economic feasibility of compliance with the proposed primary drinking water standard. When the Central Valley Water Board prescribes waste discharge requirements, it must consider the provisions in Water Code section 13241. However, if the Central Valley Water Board has considered the factors when establishing the water quality objectives, it is not obliged to consider the factors again when implementing the objectives in waste discharge requirements.

This project would evaluate, and potentially modify, existing prospective incorporation

language in the Basin Plan to address perceived inconsistencies between the legal requirements for the adoption of new drinking water standards by State Water Board and the criteria in Water Code section 13241 that the Central Valley Water Board must evaluate when issuing waste discharge requirements.

Project 16 – Delta Nutrient Research Plan

Watershed:

Sacramento-San Joaquin Delta

2024 Comment Letters Received:

None

2021 Comment Letters Received:

Restore the Delta

San Francisco Baykeeper

Other Public Interest:

Delta Nutrient Research Plan Stakeholder and Technical Advisory Group

Past Board Commitment:

R5-2018-0059 (Delta Nutrient Research Plan for Development of Information Prior to Consideration of Nutrient Numeric Objectives)

2014 Delta Strategic Work Plan

California Nonpoint Source Program Implementation Plan – 2014-2020

Project's Triennial Review History:

Rank 1 (Existing Commitments) Project in 2021 Triennial Review Workplan

Rank 1 (Existing Commitments) Project in 2018 Triennial Review Workplan

Project Description:

Nitrogen and phosphorus are important factors that affect some quality problems in the freshwater Sacramento-San Joaquin Delta. These problems include harmful algal blooms (HABs) and associated toxins and nuisance compounds, excess aquatic plant growth and low dissolved oxygen.

The Delta Nutrient Research Plan (approved by the Central Valley Water Board in August 2018) identifies information gaps in our understanding of the relationships between nutrients, other factors such as water temperature and flow, and particular water quality problems in the Delta. These problems include harmful algal blooms (HABs) and associated toxins and nuisance compounds, excess aquatic plant growth and low dissolved oxygen. The goal of the Delta Nutrient Research Plan effort is to use new information to assess the potential for water quality objectives for nitrogen and phosphorus to improve Delta water quality and protect beneficial uses.

Following the 2018 approval, Board staff worked to implement the Delta Nutrient Research Plan. Board staff obtained funding and collaborators for several special studies and modeling efforts. Additionally, the Delta Regional Monitoring Program used the Nutrient Research Plan as a guiding document for its monitoring and study designs. Implementation efforts are ongoing.

More information about Delta Nutrient Research Plan and implementation actions is available on the [Delta Nutrient Research Plan webpage](https://www.waterboards.ca.gov/centralvalley/water_issues/delta_water_quality/delta_nutrient_research_plan/) (https://www.waterboards.ca.gov/centralvalley/water_issues/delta_water_quality/delta_nutrient_research_plan/).

Major accomplishments since the 2021 Triennial Review include the following:

- The first year-round monitoring of HABs and HAB toxins in water, and benthic clams and crayfish at ten Delta locations for 28 months was completed. This project was funded by a Proposition 1 grant administered by the California Department of Fish and Wildlife.
- Through a USEPA grant, Board staff worked with an external research team to conduct a pilot study of hydrogen peroxide as a treatment for HABs and HAB toxins. Controlled treatments were conducted in large containers separated from open water at a Delta location that experiences severe annual blooms to evaluate hydrogen peroxide as a mitigation method.
- Board staff collected samples for a pilot project tracking occurrence and spread of strains of the cyanobacteria *Microcystis* in the Delta. This project tested the hypothesis that *Microcystis* cells that overwinter in sediment at a few locations are driving summer blooms at these locations and elsewhere in the Delta. The results of the pilot project were compelling and this project was expanded into a larger project with additional collaborators including the State Water Board Division of Water Rights, USGS, Department of Water Resources (DWR) and Bend Genetics to compare abundance and type of cyanobacteria cells that rest through winter in sediment at different locations in the Delta. The goal of the current project is to better understand resting populations and the potential areas for bloom initiation to inform management and mitigation strategies.
- A paper on a study of factors affecting HABs in the Stockton waterfront was published in the Journal of Environmental Management ([Preece et al., 2024](https://www.sciencedirect.com/science/article/pii/S0301479723023940?via%3Dihub) (<https://www.sciencedirect.com/science/article/pii/S0301479723023940?via%3Dihub>)). Board staff participated in this 2022 study with staff from DWR and others. Restore the Delta collected some samples and cyanobacteria toxin data. In 2022, the bloom was intense at the east end of the waterfront (McLeod Lake) and less so in the Deep Water Ship Channel and the lower San Joaquin River. Nutrient concentrations exceeded levels that would be needed to support cyanobacteria growth. The study indicated physical characteristics of the waterfront, earlier increase in water temperature, and possibly nutrient recycling contributed to excess cyanobacteria growth.
- The Water Boards supported further development and application of a biogeochemical model of nutrient transformations and fate, phytoplankton growth, hydrodynamics, and associated processes in the Delta and Suisun Bay. The model is a product of the San Francisco Estuary Institute (SFEI).

- A paper on the status, trends, and drivers of harmful algal blooms along the freshwater to marine gradient in the San Francisco Bay-Delta System was published in a special issue of San Francisco Estuary and Watershed Science (Kudela et al., 2023) and co-authored by Board staff.
- The Central Valley Water Board is participating in a NOAA funded study to enhance monitoring methodologies, develop decision support tools for managers, and develop a coordinated Bay-Delta HAB strategy. Partners on this project include the San Francisco Bay Regional Water Quality Control Board, USGS, SFEI, DWR, UC Santa Cruz, Bend Genetics, Restore the Delta, San Francisco Baykeeper, and Cal Maritime Academy.
- Board staff participated in the development of the Delta Harmful Algal Bloom Monitoring Strategy led by the Delta Science Program.

The Central Valley Water Board is committed to continuing to prioritize the Delta Nutrient Research Plan. The project was ranked Rank 1 in the 2018 Triennial Review and has resources allocated. The project is still ranked Rank 1 in this Triennial Review Workplan.

Future activities within this project will include:

- Continuing special studies of HABs to guide development of short and long-term management measures (See companion Project 30 focused on Delta waters in the Stockton area)
- Implementing the Delta HABs monitoring strategy
- Tracking trends in nutrient concentrations and loads in the Delta
- Evaluating potential threshold values for nutrients for effectiveness at improving Delta water quality
- Continuing the Water Board's permitting, enforcement and TMDL implementation activities affecting nutrients and dissolved oxygen conditions in the Delta.

Project 17 – Comprehensive Pesticides Control Program

Watershed:

Region-wide

2024 Comment Letters Received:

Sacramento River Source Water Protection Program
American River Source Water Protection Program
California Valley Clean Water Association

2021 Comment Letters Received:

Sacramento River Source Water Protection Program

Other Public Interest:**Past Board Commitment:****Project's Triennial Review History:**

Rank 3 (Meets \geq 3 Criteria) Project in 2021 Triennial Review Workplan
Rank 3 (Meets \geq 3 Criteria) Project in 2018 Triennial Review Workplan

Project Description:

Pesticides, when used properly, protect people and their environment from pests (animal, plant, or microbial) that threaten human health and human activities. However, pesticide residues that escape their intended use area may enter waters and cause beneficial use impairments, particularly aquatic life impacts. Various pesticides have been detected at toxic levels in the Central Valley water bodies. The Basin Plan contains requirements relevant to pesticides, including some narrative and numeric water quality objectives to protect beneficial uses. However, there are currently very few numeric water quality objectives for pesticides.

The Central Valley Water Board has identified many Central Valley waterways as impaired due to ambient pesticide levels on the Clean Water Act section 303(d) list. The Clean Water Act requires the development of TMDL allocations to address impairments. The Basin Plan outlines a specific review process that the Central Valley Water Board must follow to address pesticide detections and problems that are identified and for coordination with the Department of Pesticide Regulation (DPR), which regulates pesticide registration and use in California.

The Basin Plan currently has provisions that are applicable to all pesticides, as well as provisions for the specific control programs. The Central Valley Water Board has adopted TMDLs and Basin Plan amendments to address pesticide impacts. More detail about these projects can be found on the [Central Valley Water Board's TMDL webpage](https://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/) (https://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/)

These provisions should be reviewed and modified as necessary to provide a comprehensive regulatory approach to pesticide discharges in the Region.

This project considers the potential impacts of current use pesticides to ensure protection to human health as well as aquatic life. Board staff will evaluate the effectiveness of existing techniques for assessing use and occurrence of emerging pesticides. Data collection and evaluation pursuant to this project may inform the development of threshold values and/or numeric water quality objectives to address existing impairments and prevent future impairments. The Regional Water Board will communicate with the public as part of the stakeholder engagement process required for Basin Plan amendments.

Project 18 – Pyrethroid Research Plan

Watershed:

Sacramento River and San Joaquin River Basin

2024 Comment Letters Received:

None

2021 Comment Letters Received:

None

Other Public Interest:**Past Board Commitment:**

R5-2017-0057 – Amendment to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins for the Control of Pyrethroid Pesticide Discharges

Project's Triennial Review History:

Rank 1 (Existing Commitment) Project in 2021 Triennial Review Workplan

Rank 1 (Existing Commitment) Project in 2018 Triennial Review Workplan

Project Description:

On 8 June 2017, the Central Valley Water Board adopted a Basin Plan amendment which established a Control Program for Pyrethroid Pesticide Discharges (Pyrethroid Control Program) throughout the Sacramento and San Joaquin River Basins, including TMDLs for several impaired waterbodies. With USEPA approval on 22 April 2019, the Pyrethroid Control Program, including the TMDLs, became fully approved and effective.

The Pyrethroid Control Program includes a provision that no later than 19 February 2021, the Central Valley Board will work with stakeholders to develop a Pyrethroid Research Plan (Plan) that will describe research and other special studies to inform future iterations of the control program. Section 4.5.5.1(8) of the Basin Plan outlines topics for inclusion in the Plan that had been identified by Board staff as knowledge gaps during the development of the Pyrethroid Control Program Final Staff Report. Due to resource limitations and impacts of COVID-19, the Plan was delayed as all available staff resources were needed to address other components of the Pyrethroid Control Program.

In summer 2023, Board staff released a Draft Plan for public comment and hosted a staff workshop to provide participants with an opportunity to discuss the Draft Plan. The public comment period closed in September 2023, and Board staff are developing a Response to Comments, as well as revising the Draft Plan to address feedback obtained through meetings and written comments provided during the public comment period. Board staff held a second staff workshop in early 2024 to discuss the proposed revisions. Once revisions are complete, Board staff will present the Plan to the Central Valley Water Board for adoption. Once determined, the date for the public hearing for Board adoption will be publicly noticed.

Project 19 – Central Valley Rivers Mercury Control Program

Watershed:

Region-wide

2024 Comment Letters Received:

None

2021 Comment Letters Received:

None

Other Public Interest:**Past Board Commitment:**

R5-2010-0043 (Amendments to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins for the Control of Methylmercury and Total Mercury in the Sacramento-San Joaquin Delta Estuary)

Project's Triennial Review History:

Rank 3 (Meets \geq 3 Criteria) Project in 2021 Triennial Review Workplan

Rank 3 (Meets \geq 3 Criteria) Project in 2018 Triennial Review Workplan

Project Description:

Elevated mercury levels can be expected in areas where mercury was mined (Coast Range), where mercury was used to extract gold (Sierra Nevada and Cascade Range), and in downstream water bodies where mercury is methylated (Delta, rivers and reservoirs). In addition, elevated mercury levels in some waters are due to modern point and non-point sources as well as atmospheric deposition. Mercury is a problem because it accumulates in aquatic organisms to levels that pose a threat to predator species and people that eat fish.

Because of elevated mercury levels in fish tissue, numerous water bodies, including the Delta, its tributaries, and numerous reservoirs and streams have been included on the Clean Water Act Section 303(d) list of impaired water bodies. The Clean Water Act mandates that the Central Valley Water Board develop load reduction programs to resolve these water quality problems through a TMDL allocation process. Health advisories have been issued for many water bodies in the Central Valley due to the mercury levels in fish. Additional studies may result in health advisories being issued for additional water bodies as well as more water bodies being added to the Clean Water Act 303(d) list for mercury impairments.

In the past, the Central Valley Water Board adopted Basin Plan amendments that include fish tissue objectives, implementation programs, and TMDL allocations for controlling mercury and methylmercury in Clear Lake, Cache Creek and its tributaries, and the Delta.

The Delta Mercury Control Program (Resolution No. R5-2010-0043) identified methylmercury allocations for tributary inputs to the Delta and Yolo Bypass and specifically notes control programs are needed for the American, Cosumnes Feather, Mokelumne, Sacramento, and San Joaquin Rivers, and Marsh, Morrison and Putah Creeks. Board staff resources have been focused on the DMCP reconsideration which has identified a need to address the tributary river sources of mercury. Board staff have not started a formal basin plan amendment or TMDL evaluation, however, there has been funding allocated to collection of fish tissue in many upstream rivers which will inform this project.

Project 20 – Delta Mercury Control Program

Watershed:

Sacramento-San Joaquin Delta

2024 Comment Letters Received:

California Valley Clean Water Association

2021 Comment Letters Received:

Restore the Delta

Other Public Interest:

Past Board Commitment:

R5-2010-0043 (Amendments to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins for the Control of Methylmercury and Total Mercury in the Sacramento-San Joaquin Delta Estuary)

California Nonpoint Source Program Implementation Plan – 2014-2020

Project's Triennial Review History:

Rank 1 (Existing Commitment) Project in 2021 Triennial Review Workplan

Rank 1 (Existing Commitment) Project in 2018 Triennial Review Workplan

Project Description:

Elevated mercury levels can be expected in areas where mercury was mined (Coast Range), where mercury was used to extract gold (Sierra Nevada and Cascade Range), and in downstream water bodies where the mercury has been transported in the sediment (Delta, rivers and reservoirs). While elemental mercury is still toxic within certain environmental conditions, mercury methylates to form a more potent neurotoxin, methylmercury. In addition, elevated mercury levels in some waters are due to modern point and non-point sources as well as atmospheric deposition. Mercury is a problem because it accumulates in aquatic organisms to levels that pose a threat to predator species and people that eat fish. Because of elevated mercury levels in fish tissue, numerous water bodies, including the Delta, its tributaries, and numerous reservoirs and streams have been included on the Clean Water Act Section 303(d) list of impaired water bodies. Health advisories have been issued for the Delta due to the mercury levels in fish. Additional studies may result in health advisories being issued for additional water bodies as well as more water bodies being added to the Clean Water Act 303(d) list for mercury impairments.

In the past, the Central Valley Water Board adopted Basin Plan amendments (BPA) that include fish tissue objectives, implementation programs, and TMDL allocations for controlling mercury and methylmercury in Clear Lake, Cache Creek and its tributaries, and the Delta.

For the Delta Mercury Control Program review, the Board committed to consider modification of methylmercury goals, objectives, allocations, compliance dates, implementation of management practices, schedules for methylmercury controls, and consideration of a mercury offset program for dischargers who cannot meet their load and waste load allocations. The first phase of the DMCP requires entities responsible for discharging methylmercury in the Delta to conduct source control studies and evaluate methylmercury management methods. Board staff reviewed the control studies and the report by an independent Review Panel. Board staff met with dischargers and hosted a meeting for control study participants to discuss the control study reports and to summarize control study findings.

Board staff initiated the CEQA process by mailing AB 52 letters to applicable tribes on the Native American Heritage Commission List in December 2019. No consultation requests were received during the consultation period. Board staff held a virtual CEQA scoping meeting and public workshop on 24 February 2021. A second Review Panel was convened to review two delayed control studies. The Review Panel submitted its Final Report in July 2021. Information from these studies and recommendations from the Review Panel will be used to consider revisions to the Delta Mercury Control Program.

Board staff have recently completed a re-analysis using new data and literature to determine if modifications to the TMDL are necessary and developed a report, The Delta Mercury Control Program Phase 1 Review Of The Sacramento – San Joaquin Delta Estuary Total Maximum Daily Load For Methylmercury Staff Report For Scientific Peer Review (DMCP Report). The DMCP report will be released publicly and submitted for scientific peer review. A future Central Valley Water Board meeting will include an information item to discuss next steps, any potential need to revise the DMCP, and provide an opportunity for the Native American Tribes and public to present input and perspectives to the Central Valley Water Board members. If modifications are warranted, Board staff will continue the BPA process. Tribes and stakeholders will be engaged throughout the process to amend the Basin Plan.

Project 21 – Watershed-based Plan Implementation and Update for Battle Creek

Watershed:

Battle Creek Watershed (HSA# 5507.120000)

2024 Comment Letters Received:

None

2021 Comment Letters Received:

None

Other Public Interest:

Past Board Commitment:

California Nonpoint Source Program Implementation Plan – 2014-2020

Project's Triennial Review History:

Rank 3 (Meets \geq 3 Criteria) Project in 2021 Triennial Review Workplan

Rank 3 (Meets \geq 3 Criteria) Project in 2018 Triennial Review Workplan

Project Description:

Battle Creek is one of the northernmost major tributaries to the Sacramento River and is considered a high priority stream because it contains critical cold-water habitat for endangered Spring Run Chinook salmon, supports important populations of Chinook salmon and Central Valley steelhead, contains numerous fish hatcheries, and is the location of an ongoing salmonid habitat restoration project that is receiving substantial funding from local, state, and federal agencies, as well as private entities. There is concern of excessive sedimentation endangering the aquatic habitat beneficial uses. Board staff from the Nonpoint Source Program are working with stakeholders to complete a Watershed-Based Plan (WBP) which will coordinate watershed restoration efforts and disseminate information relevant to all stakeholders in the watershed.

Board staff participated in further development of the WBP through multiple activities including participation in Greater Battle Creek Working Group meetings, organization of the WBP Technical Advisory Committee, and coordination with watershed stakeholders. Board staff coordinated with US EPA to identify deficiencies within the WBP to identify a path to completion.

In 2022, a 319h grant funded project was completed within the watershed, specifically South Fork Battle Creek, that reduced sediment load to Battle Creek by approximately 251 tons/year through the decommissioning of roads and stream crossings. Additionally, Battle Creek was included as a high-quality waterbody in the 2024 Grant Program Preferences, allowing for additional use of 319h grant funds within the watershed.

Board staff are in the process of identifying funding to implement the WBP.

Project 22 – Reassessment of Beneficial Uses and Water Quality Objectives in Specific Reaches of the Pit River

Watershed:

Pit River

2024 Comment Letters Received:

None

2021 Comment Letters Received:

Modoc Resource Conservation District
Pam Giacomini (Comment received after deadline)

Other Public Interest:

Past Board Commitment:

Project's Triennial Review History:

Rank 3 (Meets \geq 3 Criteria) Project in 2021 Triennial Review Workplan
Rank 3 (Meets \geq 3 Criteria) Project in 2018 Triennial Review Workplan
Referenced in the 2011 and 2014 Triennial Review Workplans

Project Description:

The Basin Plan identifies beneficial uses for the South and North Forks of the Pit River, the Pit River from the confluence of the forks to the mouth of Hat Creek, and the Pit River from the mouth of Hat Creek to Shasta Lake. The Pit River is over 200 miles long and varies in elevation from about 4,300 feet above mean sea level at the confluence of the forks to about 1,000 feet above mean sea level at Lake Shasta.

Commenters have requested that the Central Valley Water Board re-evaluate existing beneficial uses in these reaches of the Pit River, consider designating reaches of the Pit River as supporting CUL and T-SUB beneficial uses, and divide the Pit River into additional reaches to provide more appropriate protection of the beneficial uses. Commenters have also requested that the Central Valley Water Board re-evaluate water quality objectives, including pH and temperature, for the protection of aquatic life in the Pit River and to reflect the environmental conditions in the Pit River. Several stakeholders have conducted assessments of the Pit River and have indicated an interest in conducting additional assessments that could lead to Basin Plan amendments to address beneficial uses and water quality objectives in the Pit River.

Prior to the 2021 Triennial Review, Board staff attended meetings with Modoc Resource Conservation District (MRCD) representatives and members of the Pit River Tribe to discuss the Pit River reassessment project and tour the upper Pit River watershed. These discussions culminated in an agreement with MRCD to collate all existing temperature-related water quality data and to work with Board staff to determine if additional field surveys are needed to fill data gaps. Additionally, Board staff organized

and participated in a meeting between members of the MRCD and the Pit River Tribe in January 2020. During that meeting Board staff provided a brief presentation on the history of the temperature criteria ascribed to the Pit River. The MRCD and Pit River Tribe agreed to continue discussions on this topic and Board staff agreed to facilitate these discussions if requested.

Project 23 – Implementation of the Clear Lake Nutrient Control Program

Watershed:

Clear Lake

2024 Comment Letters Received:

None

2021 Comment Letters Received:

None

Other Public Interest:**Past Board Commitment:**

R5-2006-0060 (Amendment to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins for the Control of Nutrients in Clear Lake)

California Nonpoint Source Program Implementation Plan – 2014-2020

Project's Triennial Review History:

Rank 1 (Existing Commitment) Project in 2021 Triennial Review Workplan

Rank 1 (Existing Commitment) Project in 2018 Triennial Review Workplan

Project Description:

In 2006, the Central Valley Water Board adopted a Basin Plan amendment, Resolution R5-2006-0060, to establish a TMDL and Control Program to reduce phosphorus contributions to Clear Lake and decrease the incidence of nuisance algal blooms in Clear Lake. The Basin Plan states that compliance with load and waste load allocations for phosphorus in Clear Lake is required by 19 June 2017. Many implementation actions have been completed and others are in progress. However, more data and information is needed to assess whether responsible parties are meeting their respective allocations and determine next steps for the TMDL and Control Program.

Since the 2021 Triennial Review, Board staff finalized the Technical Memo and continued implementation efforts. In 2022, the Central Valley Water Board approved the County of Lake's Best Management Practices Workplan to address the sediment phosphorus load allocation for the County's nonpoint sources. Additionally, Board staff reviewed deliverables from municipal separate storm sewer system permittees (County of Lake and Cities of Clearlake and Lakeport; collectively, Permittees) demonstrating how the Permittees plan to achieve the sediment phosphorus reductions needed to comply with the allocation in the TMDL. In response to a request from the Permittees, Board staff drafted an amended Time Schedule Order (TSO) extending the compliance deadline from 30 September 2024 to 30 September 2028 to allow the Permittees to apply for grants to adequately fund, implement, and document the sediment phosphorus reduction projects in their TSO Work Plans. At the October 2023 Board Meeting, the Central Valley Water Board adopted Resolution R5-2023-0047, which approved the

amended TSO, TSO R5-2019-1005-002.

Board staff are considering future revisions to the TMDL and Control Program based on information currently being gathered through studies and projects in the Clear Lake watershed, including the Board's Environmental Driver's study, the UC Davis study, Tribal monitoring data, and other stakeholder efforts. More information can be found on the [Clear Lake Nutrient TMDL website](https://www.waterboards.ca.gov/clearlake/nutrient/tmdl/clear_lake_nutrient_tmdl_website).

(https://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/central_valley_projects/clear_lake_nutrients/).

Board staff have continued to participate in the Blue-Ribbon Committee for the Rehabilitation of Clear Lake. Meeting details are publicly noticed by the California Natural Resources Agency. More information regarding the Committee can be found on the [Natural Resources Agency's Blue-Ribbon Committee website](https://resources.ca.gov/Initiatives/BlueRibbon-Committee-forthe-Rehabilitation-of-Clear-Lake)

(<https://resources.ca.gov/Initiatives/BlueRibbon-Committee-forthe-Rehabilitation-of-Clear-Lake>).

Project 24 – Development of Procedures to Define and Determine Naturally-Occurring Background Conditions

Watershed:

Sacramento River

2024 Comment Letters Received:

None

2021 Comment Letters Received:

None

Other Public Interest:

Past Board Commitment:

None

Project's Triennial Review History:

Rank 3 (Meets \geq 3 Criteria) Project in 2021 Triennial Review Workplan

Rank 3 (Meets \geq 3 Criteria) Project in 2018 Triennial Review Workplan

Project Description:

The Basin Plans contain a provision that “the water quality objectives do not require improvement over naturally occurring background concentrations. In cases where the natural background concentration of a particular constituent exceeds an applicable water quality objective, the natural background concentration will be considered to comply with the objective.” (CVRWQCB 2018a Section 4.2.2.1.9 and CVRWQCB 2018b Section 4.2.2) However, this provision is rarely used because of lack of agreement on how to determine naturally occurring background concentrations.

This project proposes to identify procedures to define and determine naturally-occurring background conditions.

Project 25 – Evaluation of Selenium Criteria's Protectiveness of Beneficial Uses

Watershed:

Region-wide

2024 Comment Letters Received:

Contra Costa Water District
Contra Costa County Water Agency
California Department of Fish and Wildlife
USEPA Region 9

2021 Comment Letters Received:

Richard Denton
Restore the Delta
California Sportfishing Protection Alliance
The Bay Institute
San Francisco Baykeeper

Other Public Interest:**Past Board Commitment:****Project's Triennial Review History:**

Rank 3 (Meets \geq 3 Criteria) Project in 2021 Triennial Review Workplan

Project Description:

Selenium loads in the Sacramento River watershed are naturally-occurring and are expected to remain at current levels or less. The San Joaquin River system conveys subsurface drainage and runoff to the Delta and the North Bay with additional potential to mobilize naturally-occurring selenium. Attainment of the Central Valley watershed load allocation relies on continued efforts to manage and reduce discharges of subsurface drainage in the San Joaquin River watershed. Grassland Bypass Project drainage water collected during the irrigation season has been managed within the project area since 2014, without the need to discharge. Ongoing discharges are limited to the storm season when saturated soil provides minimal capacity for reuse of water accumulated during wet weather.

The Central Valley Water Board has taken extensive measures to address selenium impacts in Central Valley waters. The Central Valley Water Board has established three TMDLs for selenium in San Joaquin River system water bodies receiving agricultural drainage. These TMDLs are implemented through the Grassland Bypass Project, and implementation actions have substantially reduced the load of selenium discharged to these water bodies.

In addition to the above TMDLs, the Central Valley Water Board executed a contract

with the United States Geological Survey to study the occurrence, distribution, and sources of Sacramento Splittail deformities believed to be caused by selenium in the San Joaquin River, Sacramento River and Delta system. Field work completed under the contract identified no new instances of splittail deformities.

A new WDR Order for the Grassland Bypass Project was adopted by the Board in December 2019. Dischargers are implementing new requirements under the Order, including an updated Drainage Management Plan, enhanced monitoring, and evaluation of fish tissue selenium levels and estimated water column selenium thresholds for protection of fish and human health. No exceedances of the site-specific selenium water quality objectives occurred from the adoption of the Order through 2023. Daily exceedances of the running 4-day average water quality objective occurred in Mud Slough from 20 February through 2 March 2024 while the Grassland Bypass Project was discharging to prevent uncontrolled ponding after a series of rain events that occurred in late 2023. The Grassland Bypass gates were closed on 28 February in response to data received on 28 February, covering February 13-19, that indicated concentrations were approaching the objective. The gates remain closed as of 28 February 2024.

Stakeholders in the 2021 and 2024 Triennial Review cycles made several comments on selenium issues including recommendations to revise or evaluate the chronic selenium water quality objectives in both the Sacramento-San Joaquin River Basin Plan and the Tulare Lake Basin Plan, rescind the acute selenium objectives from both Basin Plans, and require daily monitoring of selenium within the California Aqueduct.

Project 26 – Addressing Water Quality Issues Associated with Trash and Pathogens in the City of Stockton, the San Joaquin River Basin and the Sacramento-San Joaquin River Delta

Watershed:

City of Stockton waters, San Joaquin River, and the Delta

2024 Comment Letters Received:

None

2021 Comment Letters Received:

Restore the Delta

Other Public Interest:**Past Board Commitment:****Project's Triennial Review History:**

Rank 3 (Meets ≥ 3 Criteria) Project in 2021 Triennial Review Workplan

Project Description:

Board staff have become increasingly aware of the impact that California's unhoused population and illegal dumping is having on water quality. The Central Valley Water Board participates in regional efforts to address the water quality impacts associated with illegal dumping and homeless encampments in the Stockton area. These activities include working with local agencies and volunteers to implement clean-up activities; working with flood control agencies and local government to institute agreements for clean-up activities; and gathering information on properties with trash and debris that can impact waterways.

In addition to trash impacts, sampling for pathogen indicators has led to listing several Stockton area waterways on USEPA's Section 303(d) List of Impaired Waterways. A TMDL was approved by USEPA in 2008 to address the impairments identified in Smith Canal, Mosher Slough, Calaveras River, Five Mile Slough, Mormon Slough, and Walker Slough. Work conducted under the TMDL includes monitoring source identification and management practices. DNA source analyses identified pet waste and sanitary sewer overflows as sources. BMPs to reduce pet waste and illicit discharges and illegal connections have been implemented since 2016. The most recent assessment of receiving water quality shows an overall reduction of *E. coli* in the Stockton Urban Area under dry weather conditions. Under wet weather conditions, *E. coli* in the Stockton Urban Area showed improvement but without significant differences in the concentrations in Mosher Slough, Smith Canal, or Five Mile Slough.

Board staff will continue to:

- Assist local agencies in planning and coordinating clean-up activities in areas that could impact water quality;

- Consider options for enforcing illegal dumping (not associated with illegal camping activities) prohibitions to waterways (e.g., permitting/enforcement actions);
- Implement the existing TMDL for pathogen indicators as described above.

Additionally, this project proposes to investigate Stockton-area waterways to estimate trash levels and impacted areas and prioritize where trash and debris have the highest threat to water quality. This information could then be utilized to inform new impairments under USEPA's 303(d) List of Impaired Waterways, prioritize clean-up efforts, and inform illegal dumping (not associated with illegal camping activities) enforcement options. Listing of impairment would inform the need for additional Basin Planning activities such as control programs, TMDLs, and standards.

Project 27 – Addressing Harmful Algal Blooms in Waters in the Stockton Area

Watershed:

Stockton Area Waters

2024 Comment Letters Received:

None

2021 Comment Letters Received:

Restore the Delta

San Francisco Baykeeper

The Bay Institute

Other Public Interest:**Past Board Commitment:**

R5-2018-0059 (Delta Nutrient Research Plan for Development of Information Prior to Consideration of Nutrient Numeric Objectives)

Project's Triennial Review History:

Rank 3 (Meets \geq 3 Criteria) Project in 2021 Triennial Review Workplan

Project Description:

During the 2021 Triennial Review solicitation period Board staff received comments requesting enhanced water quality monitoring and enforcement in Stockton waterways to address harmful algal blooms (HABs). The downtown Stockton waterfront, Smith Canal, and Windmill Cove are among Delta waterways that regularly experience HABs in summer. Addressing HABs in the Delta had been prioritized in the previous Triennial Review through the implementation of the Delta Nutrient Research Plan (See Project 16). Since the 2021 Triennial Review, Board staff have developed a partnership with Restore the Delta (RTD) and as resources have allowed, Board staff have increased the frequency of HAB monitoring at the Stockton waterfront through this collaborative partnership, and more recently additional partners have been added from the State Water Board and DWR. Both Board staff and RTD have participated with other collaborative organizations and agencies in the development of the Delta Harmful Algal Bloom Monitoring Strategy, led by the Delta Science Program. This project also contributes toward the Central Valley Water Board's efforts to engage with underserved and underrepresented communities, a priority in the Central Valley Water Board's Strategic Plan.

Board Staff will continue to collaborate with other entities for HABs projects in the Stockton area as opportunities arise. Goals of work in the next Triennial Review period (as resources allow) are 1) continue and expand partnerships with community members and other agencies and stakeholders, 2) continue to collect HAB data, 3) begin to implement the Delta Harmful Algal Bloom Monitoring Strategy, and 4) use data collected to assess factors related to HAB development and decline. These factors include water

temperature, water flow and mixing, nitrogen and phosphorus concentrations, and bloom history at the location. Information gathered will be used to identify potential short- and long-term measures appropriate to mitigate and manage HABs.

Project 28 – Reviewing and Clarifying the Beneficial Uses for the California Aqueduct

Watershed:

Sacramento River Basin-San Joaquin River Basin and Tulare Lake Basin

2024 Comment Letters Received:

None

2021 Comment Letters Received:

California Sportfishing Protection Alliance

Other Public Interest:

Past Board Commitment:

Project's Triennial Review History:

Rank 5 (Meets 1 Criterion) Project in 2021 Triennial Review Workplan

Project Description:

Commenters in the 2021 Triennial Review Solicitation noted Central Valley Water Board should designate a WARM beneficial use for the California Aqueduct in the San Joaquin Basin. Additionally, commenters pointed out the ambiguous beneficial uses associated with the California Aqueduct in the Tulare Lake Basin Plan. The proposed project would be to evaluate the appropriate Beneficial Uses for the California Aqueduct and amend the Basin Plans accordingly, as needed.

Project 29 – Designate RARE, GWR, and FRSH Beneficial Uses for Waterbodies in the Sacramento River Basin and San Joaquin River Basin

Watershed:

Sacramento-San Joaquin River Basin

2024 Comment Letters Received:

California Department of Fish and Wildlife

2021 Comment Letters Received:

California's Sportfishing Protection Alliance
San Francisco Baykeeper

Other Public Interest:

Past Board Commitment:

Project's Triennial Review History:

Rank 5 (Meets 1 Criterion) Project in 2021 Triennial Review Workplan

Project Description:

Stakeholders requested that the Central Valley Water Board designate waterbodies in the Sacramento River – San Joaquin River Basin for the Rare, Threatened, or Endangered Species (RARE), Groundwater Recharge (GWR), and Freshwater Replenishment (FRSH) beneficial uses. The Sacramento River Basin – San Joaquin River Basin Plan states that surface waters with the beneficial uses of Groundwater Recharge (GWR), Freshwater Replenishment (FRSH), and RARE have not been identified in this plan. This project would involve Board staff assessing and evaluating waters in the Sacramento River Basin – San Joaquin River Basin for the RARE, GWR, and FRSH beneficial uses.

Considerations would include the efficacy of existing beneficial uses (e.g., WILD, WARM, COLD, and SPAWN) protecting aquatic and aquatic-dependent species.

Stakeholders have specifically identified the following waterbodies as warranting the RARE beneficial use:

- Mouth of the Merced River to Vernalis
- Mud Slough (north),
- San Joaquin River from Sack Dam to the mouth of Merced River
- Salt Slough
- Grassland wetland water supply channels
- Sacramento-San Joaquin Delta
- Delta Mendota Canal

- California Aqueduct
- Sacramento River
- Clear Creek
- Battle Creek
- Deer Creek
- Mill Creek

Project 30 – Designate Outstanding National Resource Waters for Medicine Lake Volcanic Basin and Fall River Springs

Watershed:

Sacramento River Basin

2024 Comment Letters Received:

Pit River Nation
Mount Shasta Bioregional Ecology Center
Trout Unlimited
Clean Water Action

2021 Comment Letters Received:

Mount Shasta Bioregional Ecology Center
Pit River Tribe

Other Public Interest:

Past Board Commitment:

Project's Triennial Review History:

Unranked project in the 2021 Triennial Review Workplan

Project Description:

During the 2021 Triennial Review, *Project 33 – Consideration of Outstanding National Resource Waters Designation for Medicine Lake Volcanic Basin* was added to the Workplan consistent with the 1 February 2022 Addendum to Workplan. The proposed project was not applied criteria or ranked for the 2021 Triennial Review Workplan. The Pit River Tribe, Mount Shasta Bioregional Ecology Center, and stakeholders requested that the Central Valley Water Board designate the Medicine Lake Volcanic Basin as an Outstanding National Resource Water (ONRW). Because of this, the Board staff committed to the development of a project fact sheet for inclusion in the 2024 Triennial Review Workplan.

Board staff have identified the process for the ONRW designation to occur through a Basin Plan amendment. In July 2022, the Executive Officer, Assistant Executive Officer, management, and staff participated in a field tour of the Medicine Lake Highlands and Fall River Springs.

The proposed project would involve reviewing information already provided to the Board, gathering any additional information needed, and evaluating all information and data to determine if Medicine Lake Volcanic Basin and Fall River Springs hydrologic resource area demonstrates exceptional significance of the waterbody. Meaningful and inclusive community outreach and engagement with tribes in the region and stakeholders would be conducted by Board staff.

Project 31 – Basin Plan Updates to Incorporate Racial Equity References and Information

Watershed:

Region-wide

2024 Comment Letters Received:

N/A

Other Public Interest:**Past Board Commitment:**

Central Valley Water Board Resolution R5-2022-0067

Project's Triennial Review History:

New Proposed Project for the 2024 Triennial Review

Project Description:

The Central Valley Water Board adopted Resolution R5-2022-0067 (Resolution) on 14 December 2022, accepting responsibility for confronting structural and institutional racism and advancing racial equity. This Resolution is an obligation shared by all staff, managers, the Board's Executive Team, and the Board members themselves. The Resolution established racial equity goals for all Central Valley Water Board programs. One of the Basin Planning and TMDL Programs' goals was to propose, as part of the triennial review process, a project to update the Basin Plans to add references to the California Communities Environmental Health Screening Tool (CalEnviroScreen) and the State Water Board's Racial Equity Resolution.

The proposed project would be to identify and update the relevant sections of the Basin Plans to include references to the available tools for identifying disadvantaged communities (DACs) as well as the State Water Board and Central Valley Water Board Racial Equity Resolutions.

Board staff have initiated efforts to compile DAC identification tools and understand their individual functionality.

- Division of Financial Assistance GIS Layer
- Disadvantaged Communities Mapping Tool developed and maintained by the Department of Water Resources (DWR)
- US Census Data
- CalEPA DAC Map Tool
- CalEnviroScreen

Project 32 – De-Designation Zone and Site-Specific Objectives Evaluation of Keswick Reservoir

Watershed:

Spring Creek, tributary to the Sacramento River

2024 Comment Letters Received:

N/A

Other Public Interest:

Past Board Commitment:

Project's Triennial Review History:

New Proposed Project for the 2024 Triennial Review

Project Description:

Spring Creek, a tributary to the Sacramento River which also flows into Keswick Reservoir, had historically been impacted by copper mining in the watershed from the Iron Mountain Mine. USEPA is currently working towards implementing a final or interim remedy within the watershed.

This project would evaluate the beneficial uses within the Spring Creek Arm of Keswick Reservoir to either de-designate a zone or set site-specific objectives in efforts to establish a final compliance point for remedial activities at the Iron Mountain Mine. Currently, the mine has an Interim Compliance Point below the Keswick Reservoir. This interim objective is not currently recognized by the Sacramento-San Joaquin River Basin Plan.

Project 33 – Designate Beneficial Uses of RARE and BIOL for Waterbodies in the Tulare Lake Basin

Watershed:

Tulare Lake Basin

2024 Comment Letters Received:

California Native Plant Society, Alta Peak Chapter
California Department of Fish and Wildlife

Other Public Interest:**Past Board Commitment:****Project's Triennial Review History:**

New Proposed Project for the 2024 Triennial Review

Project Description:

This project was developed in response to comments received in the 2024 Triennial Review solicitation process. Stakeholders requested that the Central Valley Water Board designate waterbodies in the Tulare Lake Basin for the Rare, Threatened, or Endangered Species (RARE) and Preservation of Biological Habitats of Special Significance (BIOL) beneficial use. Stakeholders have specifically identified the following waterbodies as warranting the RARE beneficial use:

- Kings River from Pine Flat Dam to the Stinson Weir on North Fork and to Empire Weir No. 2 on the South Fork;
- Kaweah River from Lake Kaweah and below Lake Kaweah;
- Tule River from Lake Success to below Lake Success;
- Kern River from Lake Isabella and downstream;
- Mill Creek source to Kings River; and
- Other Eastside Streams (from Table 2-1 of the Tulare Lake Basin Plan)

The Tulare Lake Basin Plan states that surface waters with the beneficial uses of RARE and BIOL have not been identified in this plan. The proposed project would involve assessing data and information to determine whether RARE and BIOL beneficial uses were occurring in waterbodies within the Tulare Lake Basin and developing Basin Plan Amendments to designate RARE and BIOL if deemed appropriate.

Project 34 – Evaluation and Designation for COMM

Watershed:

Region-wide

2024 Comment Letters Received:

USEPA Region 9

Other Public Interest:

Past Board Commitment:

Project's Triennial Review History:

New Proposed Project for the 2024 Triennial Review

Project Description:

This project was developed in response to the 2024 Triennial Review solicitation process.

In its comment letter, USEPA Region 9 asserted that in 1993 the Water Boards redefined the Water Contact Recreation (REC-1) and Commercial and Sport Fishing (COMM) beneficial uses in such a way that created a gap in designation for recreational or sport fishing for consumption. Therefore, USEPA Region 9 proposed that the Central Valley Water Board conduct a region-wide review of waterbody designations and determine waterbodies where COMM should be designated.

The proposed project would involve a review of historical Regional Board Basin Plan amendments and supporting documentation to verify historical beneficial use definitions and designations. The project would then involve identifying waterbodies where recreational or sport fishing for consumption is occurring but have not yet been formally designated with COMM and determining the best path forward to ensure that beneficial use designations in the region reflect the most current information.