California Regional Water Quality Control Board San Francisco Bay Region

Triennial Review 2024 Staff Report



September 13, 2024

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

1515 Clay Street, Suite 1400, Oakland, CA 94612

Telephone: • (510) 622-2300 Fax: • (510) 622-2460

https://www.waterboards.ca.gov/sanfranciscobay/

To request copies of this Staff Report,
please contact Gerardo Martinez at (510) 622-1015, or by e-mail at:
Gerardo.Martinez@waterboards.ca.gov

Documents also are available at our website:

https://www.waterboards.ca.gov/sanfranciscobay/basin_planning.html#triennialreview

Contents

1.	Introduction	1
2.	Triennial Review Process	2
3.	Summary of Public Participation Process	3
	3.1. Tribal Engagement Process	4
	3.2. Public Input in Support of Candidate Projects	6
	3.3. Other Potential Projects Proposed by Commenters	s7
4.	Project Ranking Criteria	8
	4.1. Water Board Mission (Protect Beneficial Uses)	9
	4.2. Climate Change Nexus	9
	4.3. Public Interest	9
	4.4. External Resources Already Invested	9
	4.5. Staff Resources Already Invested	9
	4.6. Implement State Water Board Policy	9
	4.7. U.S. EPA Priority	10
	4.8. External Resources Likely Available	10
	4.9. Geographic Scope	10
	4.10. Input from Internal Water Board Divisions	10
5.	Project Ranking Results	10
6.	Priority Ranking for TMDL Development	14
7.	Available Resources	14
8.	Proposed Basin Plan Projects	15
	8.1. Consider incorporating Clean Water Act section 30 into the Basin Plan	
	pendix A – 2024 Triennial Review Announcement and Inline Survey Form	nformation about

Appendix B – Rank-Ordered Descriptions of Projects Considered in the 2024 Basin Plan Triennial Review

1. Introduction

This Staff Report presents the results of the 2024 Triennial Review of the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan). The report includes a listing of proposed Basin Plan projects that may be investigated by San Francisco Bay Regional Water Board (Water Board) staff and addressed through Basin Plan amendments proposed for Water Board consideration over the next three years starting in fiscal year 25/26 and ending in 27/28.

The Basin Plan is the master policy document that contains descriptions of the legal, technical, and programmatic bases of water quality regulation in the San Francisco Bay Region, including water quality standards. The Water Board first adopted a plan for waters inland from the Golden Gate in 1968. After several revisions, the first comprehensive Basin Plan for the Region was adopted by the Water Board, and then approved by the State Water Board, in April 1975. Major revisions have been adopted since 1975 to address changing water quality conditions, priorities, and programs. Because Total Maximum Daily Load (TMDL) Basin Plan amendments are now being adopted on an on-going basis, the Basin Plan is subject to more frequent revisions than in the past. The most current version of the Basin Plan is available on the Water Board's website at this location

(http://www.waterboards.ca.gov/sanfranciscobay/basin_planning.html).

The Basin Plan establishes water quality standards for the San Francisco Bay Region. Water quality standards include designated beneficial uses for surface and ground-waters; narrative or numeric water quality objectives to protect those beneficial uses; and a provision to protect high quality waters from degrading to the level allowed by the objectives (i.e., antidegradation). Basin Plans also include implementation plans for water quality objectives, consisting of various regulatory programs.

The Triennial Review of the Basin Plan provides an opportunity to review and receive public input on water quality standards and implementation plans. The review results in list of prioritized future Basin Plan amendments with short project descriptions. The review includes solicitation of public comments on possible TMDLs that staff can support during the three-year period, but Basin Plan amendment projects to develop TMDLs are not included in the work plan. The review is required under section 303(c)(1) of the federal Clean Water Act and section 13240 of the California Water Code.

During the Triennial Review process, Water Board staff 1) consider public comments on Basin Plan projects that may require investigation; 2) develop a prioritized list of Basin Plan projects that may be pursued by Water Board staff over the next three years; and 3) present the list in the form of a resolution for Water Board consideration. The inclusion of a candidate project on the prioritized Triennial Review list does not necessarily mean that the project will be fully developed such that a Basin Plan

amendment would be accomplished in the next three years. Complex projects can take more than three years to complete, even when ranked as a priority.

This staff report includes: a description of the Triennial Review process, a summary of public and tribal participation, a description of the methodology used to evaluate and rank each candidate project, estimates of the time and staff resources needed to act on each project over the next three years, a generalized ranking of the candidate projects by priority, and a brief description (in Appendix B) of each candidate project.

2. Triennial Review Process

In early 2024, Water Board staff began the Triennial Review process by soliciting input from all Water Board divisions and reviewing available information to determine where updates may be needed to beneficial uses, water quality objectives, implementation plans, plans or policies, or where editorial changes may be needed. Water Board staff developed a tentative list of candidate Basin Plan projects for public review. This effort included: review and update of the list of priority Basin Plan projects identified in the last Triennial Review, coordination with the statewide Basin Plan roundtable, and an internal review of the Water Board's regulatory program needs. Based on this effort, Water Board staff produced and distributed a "Candidate Projects for the 2024 Triennial Review of the San Francisco Bay Basin Water Quality Control Plan" document, describing candidate projects. The nine projects included in this document are shown in Table 1. Based on public input, we updated some of these projects and added three additional projects. All candidate projects are described in more detail and in descending rank order in Appendix B.

On April 10, 2024, the public participation process for the Triennial Review formally began with the distribution of an announcement of the Triennial Review, a list of candidate projects for consideration identified by Water Board staff, and an invitation for Basin Plan amendment proposals and public comment. An online form was created to collect proposals for new Basin Plan amendments, as well as support or opposition for the listed candidate projects. The announcement specified a public comment period (April 10 – May 24, 2024) for submission of written comments. Appendix A includes a copy of the "2024 Triennial Review – Candidate Projects" announcement as well as a copy of the questions included in the online form.

Following a review of all comments submitted by the public and a systematic ranking of all the candidate projects, Water Board staff developed a prioritized list (see Section 8 below) of candidate Basin Plan projects to pursue during the upcoming three-year period.

Formal completion of the Triennial Review involves the Water Board adopting a resolution approving the Triennial Review of the Basin Plan along with a prioritized list of Basin Plan projects. Water Board staff will provide a formal response to comments

received on this staff report as part of the Board package supporting the Water Board's Triennial Review resolution.

Table 1. Basin Plan Projects Described by Water Board Staff in the Candidate Project List document released April 2024

Update Beneficial Uses
<u> </u>
2.1 Addition of Commercial and Sport Fishing Beneficial Use to Lakes
2.2 Designate Tribal Tradition and Culture, Tribal Subsistence Fishing, and
Subsistence Fishing Beneficial Uses in the San Francisco Bay Region
2.3 Evaluate and Refine the Shellfish Harvesting Beneficial Use
Update Water Quality Objectives
3.1 Consider Incorporating Clean Water Act Section 304(a) Criteria into
the Basin Plan
3.2 Clarify Implementation Requirements for Municipal Supply and
Agricultural Supply Water Quality Objectives
3.3 Clarify Turbidity Water Quality Objective
Update Implementation Plans
4.1 Climate Change and Shoreline Adaptation Policy
4.2 Climate Change and Riparian Area Protection Policy
Essential Basin Planning Activities
5.1 Editorial Revisions, Minor Clarifications, or Corrections

Note: The first digit of the project number is the Basin Plan chapter that would be revised through the proposed project.

3. Summary of Public Participation Process

On April 10, 2024, the public participation process for the Triennial Review formally began with the distribution of an announcement of the Triennial Review, a list of candidate projects for consideration identified by Water Board staff, and an invitation for Basin Plan amendment proposals and public comment.

An online form was created to collect proposals for basin plan amendments. A link to this form was shared widely through our website and e-mails to over 1,100 recipients subscribed to our Basin Planning and Total Maximum Daily Load e-mail lists. Six responses were received through the online form. These responses included support for projects identified by Water Board staff, suggestions for new potential projects for Water Board staff to consider, editorial amendment requests, and requests that would not

require a Basin Plan amendment. Many of the public comments encouraged the Water Board to continue working on candidate projects already underway. These comments are summarized below. Commenters included private citizens and representatives of different organizations. Parties who provided comments during the solicitation process are listed below:

- Bay Area Clean Water Agencies (BACWA), Mary Cousins
- City of Daly City, Tom Hall
- EOA, Inc., Tom Hall
- San Francisco Public Utilities Commission (SFPUC), Jennie Pang
- Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP), Chris Sommers
- Private Individual, Richard Bailey

3.1. Tribal Engagement Process

In parallel with the public participation process this year, Water Board staff conducted a tribal engagement process. Staff invited tribes to review and comment on the 2024 Triennial Review candidate projects through letters, e-mails, and phone calls. Water Board staff-initiated outreach by sending hard copy letters and e-mails on March 25, 2024, to 33 tribes. Although no tribes responded directly to Water Board staff through letters, e-mails, or via the online form, Water Board staff did receive support to continue with the project "Designate Tribal Tradition and Culture, Tribal Subsistence Fishing, and Subsistence Fishing Beneficial Uses in the San Francisco Bay Region" through interactions on that project.

Amah Mutsun Tribal Band	Indian Canyon Mutsun Band of Costanoan	Tule River Indian Tribe
Amah Mutsun Tribal Band of Mission San Juan Bautista	Kashia Band of Pomo Indians of the Stewarts Point Rancheria	United Auburn Indian Community of the Auburn Rancheria
Cachil Dehe Band of Wintun Indians of the Colusa Indian Community	Lytton Rancheria	Wilton Rancheria
Chicken Ranch Rancheria of Me-Wuk Indians	Middletown Rancheria of Pomo Indians	Yocha Dehe Wintun Nation
Cloverdale Rancheria of Pomo Indians	Mishewal-Wappo Tribe of Alexander Valley	Muwekma Ohlone Indian Tribe of the SF Bay Area
Confederated Villages of Lisjan Nation	Muwekma Ohlone Indian Tribe of the SF Bay Area	Nashville Enterprise Miwok-Maidu-Nishinam Tribe
Cortina Rancheria - Kletsel Dehe Band of Wintun Indians	Northern Valley Yokut/Ohlone Tribe	Northern Valley Yokut/Ohlone Tribe
Costanoan Ohlone Rumsen-Mutsen Tribe	Robinson Rancheria of Pomo Indians	Pinoleville Pomo Nation
Costanoan Rumsen Carmel Tribe	Sherwood Valley Rancheria of Pomo	Wilton Rancheria
Federated Indians of Graton Rancheria	Tamien Nation	Wuksachi Indian Tribe/Eshom Valley Band
Guidiville Indian Rancheria	The Ohlone Indian Tribe	Dry Creek Rancheria of Pomo Indians

3.2. Public Input in Support of Candidate Projects

Many commenters supported various projects presented by Water Board staff in the document describing the candidate projects for the 2024 Triennial Review. Those projects receiving supporting comments are discussed below along with relevant concerns or clarifying comments, if any, expressed by the commenter. Please note the project numbering system below is a way of uniquely identifying projects based on the chapter in which the edits are focused, which is independent of the later ranking (see Table 1 for the full list of projects).

- 2.2 Designate Tribal Tradition and Culture, Tribal Subsistence Fishing, and Subsistence Fishing Beneficial Uses in the San Francisco Bay Region. BACWA encourages the Water Board to move forward with designating these beneficial uses.
- 2.3 Evaluate and Refine the Shellfish Harvesting Beneficial Use. Three entities supported this project. SFPUC supports this project and notes that many locations in the Bay Area do not have shellfish harvesting and asserts that refining this beneficial use will help save resources. EOA, Inc. supports this project and recommends refining the SHELL definition to differentiate commercial/recreational shellfish harvesting and adding definition of shellfish bed (e.g., edible shellfish present in legal sizes and numbers worth the effort of harvesting by the public). BACWA also supports this project and recommends refining spatial and temporal patterns of shellfish harvesting, as well as distinguishing between commercial and recreational shellfish harvesting.
- 3.2 Clarify Implementation Requirements for Municipal Supply and Agricultural Supply Water Quality Objectives. BACWA encourages the Water Board to pursue this Basin Plan amendment citing that "it would be helpful in clarifying NPDES permit requirements for the handful of municipal wastewater treatment plans that discharge to water bodies supporting the municipal (MUN) and agricultural supply (AGR) beneficial uses."
- **3.3 Clarify Turbidity Water Quality Objective.** BACWA encourages the Water Board to move forward with this project and recommends the use of precise language when describing light penetration and turbidity.
- **4.1 Climate Change and Shoreline Adaptation Policy.** BACWA supports this project and recommends that the Water Board use the Basin Plan to encourage the use of wastewater in creating, restoring, and enhancing wetlands when such projects have the potential to increase shoreline resiliency.
- **6.1 Editorial Revisions, Minor Clarifications, or Corrections.** EOA, Inc., and BACWA supported this project and provided further recommendations. EOA, Inc., supports updating the Toxicity Provisions in the Basin Plan Section 4.5.5.3 and recommends that the Water Board remove outdated references and conforms with

State Water Board Toxicity Provisions. EOA, Inc., also supports replacing and expanding the Compliance Schedule in the Basin Plan Section 4.7.6 to conform with State Water Board Policy and address schedules longer than ten years for nutrients. EOA, Inc., also suggests that the Water Board update Dilution Ratios in the Basin Plan Section 4.6.1 to remove outdated language and reference the current San Franciso Estuary Institute Bay-wide 3-D hydrodynamic biogeochemical model with shallow and deepwater dilution capabilities. In addition, EOA, Inc., recommends a language update in Background Concentration in the Basin Plan Section 4.6.3 which reflects use of multiple concentrations instead of a single bay-wide background concentration. EOA, Inc., recommends a language update in Cyanide in the Basin Plan Section 4.7.2.2 to reflect that alternative dilution credits to those contained in Table 4-6 may be applied for calculation of shallow water discharge effluent limits consistent with the Basin Plan Amendment adopted per Resolution R2-2023-0026. BACWA supports a Basin Plan amendment to update toxicity testing requirements that have been superseded by statewide policy. Lastly, BACWA urges the Water Board to make a single, searchable version of the Basin Plan available in either HTML or PDF format. Staff note that the Basin Planning webpage contains an HTML version of the complete Basin Plan text, not including tables or figures, that is useful for text searches.

3.3. Other Potential Projects Proposed by Commenters

Public comments covered a wide range of potential new projects not on the proposed list. Water Board staff considered these comments and determined whether to evaluate a newly proposed project as a candidate Basin Plan project.

In summary, the solicitation process and public input resulted in a total of three additional candidate Basin Plan projects to be considered and ranked during the 2024 Triennial Review. The ranking process is described in section 4 below, and summaries of all ranked projects are included in Appendix B.

In the following table, we summarize the additional candidate projects suggested by stakeholders and explain the resolution to the suggestion.

Table 2. Additional Candidate Projects Suggested by Commenters

Entity	Topic	Resolution
Richard Bailey (Private Individual)	"Use of local dredged material to create a wetland / erosion control area in Lake Merritt. This project was evaluated and supported in the Lake Merritt Enhancement Plan and amendments (Water Board Staff have a copy). Details are described in that document. This project would increase wildlife habitat, improve water quality, limit	This additional candidate project did not apply to the Triennial Review. However, the comments were shared with Water Board staff working on the development of a Total Maximum Daily Load / Advance Restoration Plan to improve low dissolved oxygen in Lake Merritt.

Entity	Topic	Resolution
	shoreline erosion, and significantly lower cost for disposal of dredged material."	
City of Daly City	The Water Board should "modify Basin Plan Section 3.3.9 to add new pH freshwater quality objectives for Lake Merced based on the existing USEPA freshwater quality criteria (EPA Gold Book, 1986) of 6.5 - 9.0 based on factors specific to Lake Merced."	A candidate project description was created (see Appendix B), and this project has been ranked during the 2024 Triennial Review.
EOA, Inc., and BACWA	The Water Board should develop a Water Quality Attainment Strategy for nutrient management in SF Bay that provides an implementation framework and extended compliance schedule.	A candidate project description was created (see Appendix B), and this project has been ranked during the 2024 Triennial Review.
SCVURPPP	SCVURPPP remains interested in the candidate project to evaluate the contact recreation beneficial use designations for creeks and channels in Santa Clara County.	A candidate project description was created (see Appendix B), and this project has been ranked during the 2024 Triennial Review.

4. Project Ranking Criteria

For every Triennial Review, there are more candidate projects than can be accomplished with available resources: two full-time staff positions funded for Basin Planning efforts. Thus, it is necessary to rank candidate projects to identify the highest priorities. The ranking criteria and scoring are straightforward. Each candidate project receives an overall score, which sums the project's individual scores for several ranking criteria. The highest score possible for a candidate project is 90 points, and the highest scoring projects will be given priority for Water Board staff action in the following three-year period, subject to available resources. It is important to emphasize that the score assigned to a project for each ranking criterion merely reflects how this project compares to other candidate projects in this scoring category. This scoring is not intended as a judgment of the absolute merit of the project with respect to this scoring category. The ranking criteria and scoring are described below.

4.1. Water Board Mission (Protect Beneficial Uses)

Projects that promote protection or restoration of beneficial uses were given higher scores (20 is the highest score possible), while projects that would result in little or no direct improvement of beneficial uses were given lower scores. A score of zero was given for projects judged not to include some strengthening of beneficial use protection or restoration.

4.2. Climate Change Nexus

This criterion recognizes the value of projects that involve some adaptation or policy response to climate change. The Water Board has identified climate adaptation as a priority for 2021 and will likely continue to make it a priority in the future. Staff have made significant investments in new partnerships and stakeholder engagement, developed policy and permitting language to include in future regulation, and provided technical assistance to communities around the Bay to support climate change risk assessments and adaptation plans. This work is on-going, and staff expects our climate change adaptation strategy to include Basin Plan projects. The maximum score for this criterion is 15 points.

4.3. Public Interest

Water Board staff solicited input from the public, including the regulated community, citizens, and environmental groups. Projects supported by multiple parties or stakeholders received the highest score of ten in this category.

4.4. External Resources Already Invested

This criterion recognizes and gives higher priority to projects for which external resources have already been expended. External resources may include grant funding or funding provided by affected parties to assist Water Board staff in coordinating technical information and stakeholder outreach for Basin Plan amendments. Projects that have received substantial external investment received a score of ten; other projects received a score in proportion to the amount of external resources invested to date.

4.5. Staff Resources Already Invested

This criterion recognizes and gives higher priority to projects for which the Water Board has already expended substantial staff resources. Projects already underway for a year or more received a score of ten. Projects for which no work has been undertaken received a score of zero. Projects for which some staff resources have been expended but are still at early stages of development were assigned a score in proportion to the amount of resources expended to date.

4.6. Implement State Water Board Policy

In all Triennial Reviews conducted by the Regional Water Boards, one of the first items reviewed is whether there have been changes in statewide policies or plans that result in Basin Plan language inconsistent with the new plans or policies. A highest score of

five was given to projects that would bring the Basin Plan into conformance with statewide plans or policies.

4.7. U.S. EPA Priority

Projects that address comments in a U.S. EPA Basin Plan approval letter or other input from U.S. EPA, such as the comment letters on previous Basin Plan amendments or the comment letter on past or current Triennial Reviews, where U.S. EPA stated strong support for a project, were given a score of five, and candidate projects that did not relate to known or stated U.S. EPA interests received a score of zero. In some cases, projects were given a score between zero and five if U.S. EPA expressed an interest in the topic area.

4.8. External Resources Likely Available

Similarly, where external resources will be (or will continue to be) dedicated to a project, higher priority is given. Such resources would augment Water Board staffing, helping to complete controversial or complex projects that otherwise might not have adequate staffing. Scores were assigned based on experience with projects where external resources have been invested, as described above, with a maximum possible score of five. Other projects received a score in proportion to the amount of likely external resources available.

4.9. Geographic Scope

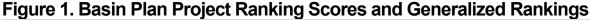
Projects that address multiple water bodies and regulated entities throughout the Region received higher scores (maximum of five) than projects that were specific to a location or discharger.

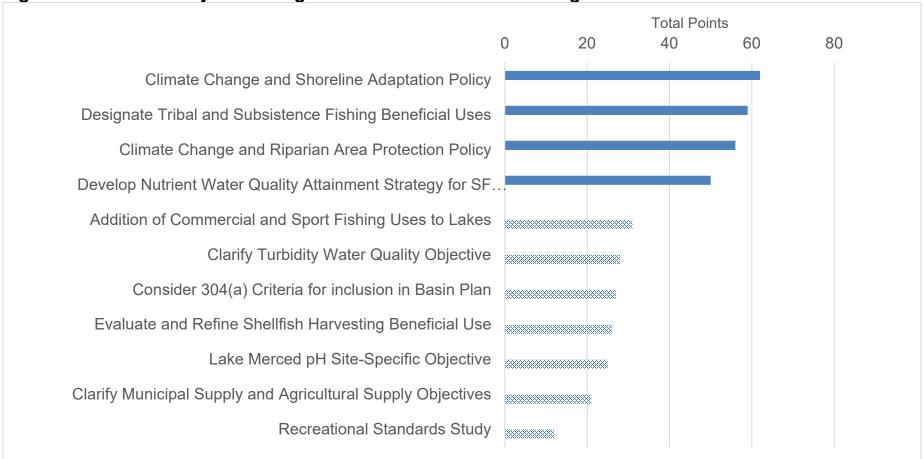
4.10. Input from Internal Water Board Divisions

Staff from the Water Board's Toxics, Groundwater Protection, Watershed, NPDES, and Planning divisions were tasked with identifying Basin Plan projects that would facilitate program implementation, clarify the Basin Plan, and provide better customer service. Five points were given to projects identified as top division priorities.

5. Project Ranking Results

Using the criteria described in Section 4, a score was assigned for each criterion for every candidate Basin Plan project. Points across all ranking criteria were summed for almost every project to determine its overall score. The "Editorial Revisions, Minor Clarifications, or Corrections" project was reclassified as an essential Basin Planning activity and therefore removed from the ranking process. The overall score and rank for each candidate project are graphically displayed in Figure 1. Criteria scores for individual projects are shown in Table 3.





The bars on this page reflect the points allocated based on the Project Ranking Criteria described in Section 4. The following table shows the points for each project and criterion in more detail. The highest score possible for a candidate project is 90 points. The solid fill indicates that these projects received enough points to be prioritized for this Triennial Review which will be undertaken in fiscal years 25/26 through 27/28. The final project (Develop Nutrient Water Quality Attainment Strategy for SF Bay) is only partially staffed with existing Basin Planning resources.

Table 3. Rank-Ordered Scoring for Individual Projects

	Table 3. Rank-O	ruereu S	corning i	or marvi	duai Proje	ClS						
Rank	Project Title	Water Board Mission (20 pts)	Climate Change Nexus (15 pts)	Public Support (10 pts)	External Resources Invested (10 pts)	Staff Resources Invested (10 pts)	Implement State Board Policy (5 pts)	U.S. EPA Priority (5 pts)	External Resources Likely Available (5 pts)	Geographic Scope (5 pts)	Input from Water Board Divisions (5 pts)	Score (90 pts total)
1	Climate Change and Shoreline Adaptation Policy	15	15	3	6	5	3	0	5	5	5	62
2	Designate Tribal and Subsistence Fishing Beneficial Uses	20	0	3	5	10	5	5	3	3	5	59
3	Climate Change and Riparian Area Protection Policy	15	15	0	5	5	3	0	3	5	5	56
4	Develop Nutrient Water Quality Attainment Strategy for SF Bay	10	5	5	10	5	0	0	5	5	5	50
5	Addition of Commercial and Sport Fishing Uses to Lakes	10	0	0	2	6	3	5	0	5	0	31
6	Clarify Turbidity Water Quality Objective	10	0	3	0	5	0	0	0	5	5	28
7	Consider 304(a) Criteria for inclusion in Basin Plan	10	0	0	5	2	0	5	0	5	0	27
8	Evaluate and Refine Shellfish Harvesting Beneficial Use	5	0	8	0	2	3	0	3	5	0	26
9	Lake Merced pH Site-Specific Objective	5	0	3	6	5	0	0	5	1	0	25

Rank	Project Title	Water Board Mission (20 pts)	Climate Change Nexus (15 pts)	Support	External Resources Invested (10 pts)	Staff Resources Invested (10 pts)	Implement State Board Policy (5 pts)	U.S. EPA Priority (5 pts)	External Resources Likely Available (5 pts)	Geographic Scope (5 pts)	Input from Water Board Divisions (5 pts)	Score (90 pts total)
10	Clarify Municipal Supply and Agricultural Supply Water Quality	5	0	3	0	0	0	0	3	5	5	21
11	Recreational Standards Study	5	0	3	0	0	0	0	3	1	0	12
12*	Editorial Revisions, Minor Clarifications, or Corrections	-	-	-	-	-	-	-	-	-	-	-

Notes:

The highest score possible for a candidate project is 90 points.

^{*} The "Editorial Revisions, Minor Clarifications, or Corrections" project was reclassified as an essential Basin Planning activity and therefore removed from the ranking process.

6. Priority Ranking for TMDL Development

Water Board staff are working on developing a range of TMDL projects throughout the Region. TMDLs often include water quality standards issues, and most will be adopted as Basin Plan amendments. For these reasons, we include our TMDL priorities in the Triennial Review. Staff has identified the following TMDL projects as the highest priority for development and completion as Basin Plan amendments over the next three years:

- Pescadero Marsh Low Dissolved Oxygen TMDL alternative / Advance Restoration Plan
- San Francisco Bay Beaches Pathogens 2 TMDL (Coyote Point Beach in San Mateo, Erckenbrack Park Beach, Gull Park Beach, Marlin Park Beach, and Kiteboard Beach in Foster City; and Oyster Point Beach in South San Francisco)
- Lake Merritt Dissolved Oxygen TMDL alternative / Advance Restoration Plan

TMDL projects with the label <u>Advance Restoration Plan</u> may be addressed by developing a Water Quality Improvement Plan (WQIP), rather than a TMDL and Basin Plan amendment. Development of a WQIP does not remove our obligation to address the impairment with a TMDL if standards are not attained in a reasonable time frame.

7. Available Resources

Non-TMDL Basin Plan resources for the San Francisco Bay Region consist of 2 personnel-years (PY) within each fiscal year. Available Planning Division staff over the next three years (FY 25/26 to 27/28) is thus estimated at 6 PY, pending any future budget changes. Approximately one-sixth of these Basin Planning staff resources will be reserved for activities that are not discretionary so approximately 5 PY remain for allocation to Basin Plan projects.

These non-discretionary activities fall into two categories. First, Basin Planning staff must represent the Water Board by participating in a variety of roundtables, committees, and stakeholder processes. These include statewide Basin Planning roundtable and workgroups associated with development of statewide policies (e.g., the Biostimulatory Substances Objective and Program to Implement Biological Integrity). Second, the Planning Division has a responsibility to ensure that the Basin Plan is kept up-to-date and accurate by making changes to the Basin Plan that clarify or update some of the program descriptions to be consistent with new laws, plans, and regulations or to correct minor errors. These changes are sometimes needed for clarity and to ensure that the public is informed about the latest requirements to protect water quality. Funding will be

used to merge some Basin Plan cleanup along with an existing Basin Plan amendment.

For work planning purposes, low complexity Basin Plan projects require between 0.3 and 0.5 PY to result in Board action. This is the minimum amount of resources required by a Basin Plan project due to the effort-intensive public process required for the Regional Board adoption and State Board approval processes. Medium complexity amendments generally require between 0.6 and 1.2 PY, depending on whether substantial investigatory work has already been accomplished, including resource expenditure external to the Water Board. High complexity projects generally require from 1.5 to 3.0 PY over three years, both because of greater investigatory requirements and level of controversy.

Planning Division staff believes that all candidate projects identified through this Triennial Review merit at least an initial assessment and investigation to determine if the project should be fully executed. A low rank during this review does not imply that staff concludes that the project should not, at some point, be pursued. The work planning exercise of the Triennial Review highlights the fact that, while numerous outstanding Basin Planning actions are warranted at this and other Water Boards, there are not sufficient staff resources to accomplish every project in the near term.

In the San Francisco Bay Region, staffing for planning has historically been augmented by other sections or divisions to address outstanding issues that affect a particular Water Board program. In addition, other resources from external sources are sometimes available to help augment Basin Planning activities. While not a certainty, other resources, external and from other divisions of the Water Board, may be available to augment the 5.0 PY available for Basin Plan projects, and thus additional projects may be considered during any given year.

8. Proposed Basin Plan Projects

Based on the ranking criteria and available resources, as described in previous sections of this staff report, the projects shown in Table 4 comprise staff's recommendation for the Basin Planning work plan for the San Francisco Bay Region for the next three years occurring in fiscal years 25/26, 26/27, and 27/28. This table shows all high priority projects that can be accomplished with existing Basin Planning resources (5.0 PY).

Basin Plan projects that ranked below the level for which resources are available have not been eliminated from further consideration. For instance, if higher ranking priority projects take less staff time than estimated, additional lower ranked projects not shown in this table may be addressed during the next three years. Affected parties may also provide resources to address specific planning issues in partnership with the Water Board, recognizing that at least some Water

Board staff time is necessary to accomplish such Basin Planning. Each year, Water Board staff will develop annual work plans for non-TMDL Basin Plan projects, coordinated with the statewide Basin Planning Roundtable. As internal or external resources are identified and targeted to Basin Planning activities over the next three years, the prioritized list reflected in Figure 1 and the project descriptions in Appendix B will provide guidance as to where to direct those resources.

Table 4. High Priority Basin Plan Projects Versus Available Resources

Project	Required PY	Cumulative PY
Climate Change and Shoreline Adaptation Policy	1.5	1.5
Designate Tribal Tradition and Culture, Tribal Subsistence Fishing, and Subsistence Fishing Beneficial Uses in the San Francisco Bay Region	1.0	2.5
Climate Change and Riparian Area Protection Policy	1.5	4.0
Develop Nutrient Water Quality Attainment Strategy for SF Bay	1.5	5.5

The lowest-ranked priority project exceeds the allocated cumulative 5.0 PY available for the next three years. We anticipate that some parts of this project will be completed with the available resources.

8.1. Consider incorporating Clean Water Act section 304(a) criteria into the Basin Plan

The candidate project to incorporate Clean Water Act (CWA) section 304(a) criteria into the Basin Plan scored 27 points and did not rank highly enough (ranked 7th) to be included in the high priority workplan projects for the next three years. Many of the 304(a) criteria were promulgated in the California Toxics Rule, and revising such criteria involves considerable time and effort. Staff concur with the past determination by the Los Angeles Regional Water Board that consideration of the bulk of these 304(a) criteria for adoption as water quality objectives would be most efficiently undertaken by the State Water Board's Division of Water Quality, since the recommended criteria could apply statewide. Therefore, once adopted as amendments to existing statewide water quality control plans, the water quality objectives would apply to all waters in the State. Also, given the limited resources of the Basin Planning Program (< 2.0 PY) and the number of new and updated U.S. EPA recommendations, it would take a significant amount of time for Water Board staff to address all these new and updated recommendations through amendments to Regional Board Basin Plans.

Basin Plan Triennial Review Staff Report San Francisco Bay Regional Water Quality Control Board

September 2024

In view of this reasoning and the low project rank, we do not intend to work on any 304(a) criteria contaminants. Because of ongoing and planned efforts to update statewide water quality objectives, staff believes further work on this issue is not needed at this time. In response to the explanation requirement at 40 CFR 131.20, staff will defer adopting new or revised water quality objectives in the Basin Plan at this time because of the resource commitments required to undertake such a task.

STAFF REPORT

APPENDIX A: 2024 TRIENNIAL REVIEW ANNOUNCEMENT AND INFORMATION ABOUT ONLINE SURVEY FORM



2024 Triennial Review - Candidate Projects

California Water Boards sent this bulletin at 04/10/2024 02:35 PM PDT



2024 Triennial Review of the Basin Plan

The San Francisco Bay Regional Water Quality Control Board (Water Board) is conducting the 2024 Triennial Review of the water quality standards in the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan). The Water Board's Triennial Review will identify issues that are considered a priority to address through Basin Plan amendment projects.

Based on comments from interested parties, coordination with the statewide Basin Plan roundtable, and a review of regulatory program needs, Water Board staff have identified a list of candidate projects for consideration.

You are invited to comment as part of our first (informal) comment period. The goal of this first comment period is to identify new projects and to receive feedback on support or opposition for the current candidate projects. Please fill out our online form with your project proposals and feedback; a copy of the questions can be found on our website.

If you have questions, reach out to Sami Harper (samantha.harper@waterboards.ca.gov).

Fill out the comment form

SF Bay Water Board Triennial Review - 2024

This Form solicits input regarding the 2024 Triennial Review of the Water Quality Control Plan for the San Francisco Bay Region ("Basin Plan"). Please be aware that the open response questions have a 4000-character limit (including spaces) and make your responses as clear and complete as possible. Regional Water Board staff recommend that submitters first draft their responses in a word processor or similar software, and then copy and paste the text into the Form.

If you need assistance filling out this Form, please contact: Samantha Harper (510) 622-2415 samantha.harper@waterboards.ca.gov

Please include the words TRIENNIAL REVIEW (all capitalized) in the subject line of your email. Please note that the same character limits apply to paper and electronic versions. Reference or supporting documents, data, information, or evidence are addressed in the last section of this Form.

This form replaces our past practice of doing a workshop in the spring of the Triennial Review year. This form will not require a formal response to comments. However, your input may be used to alter candidate project descriptions, add new projects to the final list for consideration, and assign a value for the "public support" for each candidate project.

If you need language assistance with this webpage, please contact the Office of Public Participation at (916) 341-5254 or at OPP-LanguageServices@waterboards.ca.gov.

This form will remain open until May 24, 2024, at 5 PM.

To obtain a copy of the guestions used in the survey form visit our website.

STAFF REPORT

APPENDIX B: RANK-ORDERED DESCRIPTIONS OF PROJECTS CONSIDERED IN THE 2024 BASIN PLAN TRIENNIAL REVIEW

Contents

Editorial Revisions, Minor Clarifications, or Corrections B-3
1. Climate Change and Shoreline Adaptation PolicyB-5
2. Designate Tribal Tradition and Culture, Tribal Subsistence Fishing, and Subsistence Fishing Beneficial Uses in the San Francisco Bay Region B-6
3. Climate Change and Riparian Area Protection PolicyB-7
4. Develop Nutrient Water Quality Attainment Strategy for San Francisco Bay. B-9
5. Addition of Commercial and Sport Fishing Uses to Lakes B-9
6. Clarify Turbidity Water Quality ObjectiveB-10
7. Consider Incorporating Clean Water Act 304(a) Criteria into Basin Plan B-11
8. Evaluate and Refine Shellfish Harvesting Beneficial Use B-12
9. Lake Merced pH Site-Specific Objective ProjectB-12
10. Clarify Implementation Requirements for Municipal Supply and Agricultural Supply Water Quality ObjectivesB-13
11. Santa Clara Valley Water Contact Recreation (REC-1) Standards Study B-14

Editorial Revisions, Minor Clarifications, or Corrections

Possible Basin Plan editorial changes have been identified by Water Board staff and through suggestions submitted by the public during previous Triennial Reviews. Some of these could be included as additional components for another Basin Plan project. Potential changes include but are not limited to:

- Update Section 4-8 (Stormwater Discharges) to incorporate by reference the limitations on point source stormwater and nonpoint source discharges to provide special protections for marine aquatic life and natural water quality in Areas of Special Biological Significance (ASBS).
- Update Sections 4-8 and 4-14 on urban stormwater to remove outdated and confusing terminology. The two sections should be combined, streamlined, and edited to be consistent with current regulatory practices.
- Discuss requirements of the Sustainable Groundwater Management Act in Chapter 4.
- Discuss direct and indirect potable use programs in Chapter 4.
- Cleanup Chapters 5 and 6 in terms of citations to plans and policies as well as water quality monitoring information. Consider dropping Chapter 6 and moving essential material elsewhere in the Basin Plan.
- Update or delete Figure 4-4 noting dredge material disposal and beneficial reuse sites.
- Add to the Basin Plan several unnamed water bodies that receive permitted discharges. The Basin Plan names some of the water bodies in the San Francisco Bay Region and designates beneficial uses for these water bodies. However, a small number of NPDES wastewater permits cover discharges to water bodies not named in the Basin Plan. This should be a straightforward project that could feasibly be combined with another Basin Plan amendment.
- Update the Basin Plan's toxicity testing requirements. In December 2020, the State Water Board approved an amendment to the Toxicity Control Provisions of the Policy for Implementation of Toxic Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California. The new toxicity provisions supersede aspects of the Basin Plan's current toxicity policy, so the Basin Plan must be edited to conform to the policy. This change would add reference to the Toxicity Provisions, remove the superseded text.
- Align the Ocean Plan and Basin Plan for recreational contact use (REC1). The
 applicability of the water contact recreation (REC1) beneficial use in the Pacific
 Ocean is defined in the California Ocean Plan. The Ocean Plan restricts effluent
 limits intended to protect REC1 to a zone bounded by the shoreline and a

distance of 1,000 feet from the shoreline or the 30-foot depth contour and areas designated with REC1 by a regional board. The Basin Plan provides no specific details on where REC1 applies, which leads to complications in writing NPDES permits for the San Francisco Public Utilities Commission's Oceanside outfall that discharges effluent well beyond State waters. The project would clarify that the Basin Plan's application of REC1 to the Pacific Ocean would be equivalent to the Ocean Plan's distance and depth contour specification.

- Add useful cross references to State Water Board policies to sections where they come up. For example, add to Basin Plan section 3.3.12 a sentence like "The 'Water Quality Control Plan for Enclosed Bays and Estuaries of California' contains Sediment Quality Provisions, including additional water quality objectives and related implementation provisions." And add to Basin Plan section 4.5.5.3 a sentence like "The 'Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California' contains additional water quality objectives and related implementation requirements."
- Replace the Basin Plan section 4.7.6 requirements for a compliance schedule with a reference to the requirements the State Water Board set forth in its Compliance Schedule Policy.
- Update the descriptions in Sections 4.11.3-4.11.5 as it is outdated. This revision
 would consider removing the language of these sections entirely, as the
 changing nature of the regulated community does not necessarily need to be
 documented in our Basin Plan.
- Documenting the Regional Water Board approved Salt and Nutrient Management Plans (SNMPs) for the Napa-Sonoma Valley: Sonoma Valley (2-2.02), Livermore Valley (2-10), and Santa Clara Valley (2-9.02) groundwater basins/sub-basins.
- Revising groundwater basin boundary maps to align with California Department
 of Water Resources Bulletin 118 changes that occurred as per the Sustainable
 Groundwater Management Act (SGMA) process. This includes adding a
 description of the changes in Basin Plan section 2.2.2 and revising Basin Plan
 Figures 2-10, 2-10C, and 2-10D to reflect the current California Department of
 Water Resources Bulletin 118 basin boundaries for the Westside Basin (2-35),
 Islais Valley Basin (2-33), and the Santa Clara Valley:Niles Cone sub-basin (29.01).
- Adding a description of our environmental screening levels (ESLs) that are used
 to inform our investigation and cleanup decisions. ESLs are conservative
 contaminant concentrations in a particular media (soil, soil gas, or groundwater)
 below which the contaminant can be assumed not to pose a significant, longterm (chronic) threat to human health and the environment.

- Adding a description of the State Water Resource Control Board's Low-Threat Underground Storage Tank Case Closure Policy that is used to assess leaking petroleum underground storage tanks in the Region.
- Incorporate statewide mercury objectives into the Basin Plan. In 2017, the State Water Board adopted Resolution No. 2017-0027, which established five new mercury water quality objectives for the protection of people and wildlife that consume fish and apply to all the inland surface waters, enclosed bays, and estuaries of the State that have the applicable beneficial uses. This effort involves making non-regulatory amendments to the Basin Plan to incorporate these new objectives and make necessary clarifications as to their applicability for various waterbodies throughout the Region.

1. Climate Change and Shoreline Adaptation Policy

The Water Board adopted the Basin Plan amendment for Climate Change and Shoreline Adaptation in June 2024 and anticipates completing the State Board and the Office of Administrative Law approvals in fiscal year 2024-2025. The Basin Plan amendment is non-regulatory and includes two components: (1) a narrative description added to Chapter 1 to explain how climate change could lead to physical and biological impacts in our region and (2) updated language in Chapter 4 to describe our planning and permitting processes for climate adaptation projects in coastal waters, including projects that result in fill in wetlands.

Future phases or components of this Basin Planning Project could explore changes to policies in the Basin Plan to address program needs or additional policy development to (1) facilitate the beneficial use of dredged sediment and soil/sediment from other sources, (2) clarify the alternative analysis and compensatory mitigation requirements for green and grey infrastructure, (3) continue to advance use of nature-based shoreline adaptation solutions based on lessons learned from implementation of the first Basin Plan amendment, and/or (4) address projected impacts to beneficial uses from the effects of groundwater rise in response to sea level rise.

Water Board staff have been working to maximize beneficial use of dredged sediment by participating in the Long-Term Management Strategy for Placement of Dredged Material in the San Francisco Bay Region. Water Board staff have also been collaborating with the South Bay Salt Pond Restoration Project to increase the beneficial use of upland soil for tidal marsh restoration by refining the screening process for upland soil. Based on this preliminary work, Water Board staff anticipate a potential future need for a Basin Plan amendment to advance beneficial use of dredged sediment and soil/sediment from other sources.

Water Board staff anticipate a future need to clarify the alternative analysis and compensatory mitigation requirements for green and grey climate adaptation projects. Green climate adaptation projects use nature-based infrastructure, such as marsh

restoration and coarse beaches, to increase the resiliency of shorelines to sea level rise and other climate change impacts. Grey climate adaptation projects are human-engineered infrastructure, such as seawalls and revetments that protect coastal communities from flooding. In places where green infrastructure is not feasible, grey infrastructure may be necessary to protect transportation, energy-generation and wastewater treatment facilities, and communities from sea level rise. Clarifying the Water Board's approach for permitting green and grey climate adaptation projects would provide regulatory certainty for the regulated entities and landowners along the shoreline.

Water Board staff also anticipate a potential future need for a Basin Plan amendment after gathering lessons learned from implementation of the Climate Change and Shoreline Adaptation Basin Plan amendment described here. For instance, there may be a need to clarify mitigation and monitoring requirements for conversion of one wetland type to another wetland type.

RANKING DETAILS

CATEGORY: Update Plans and Policies and Update Implementation Plan

PROPOSED BY: Water Board

SUPPORTED BY: Water Board, Bay Area Clean Water Agencies (BACWA)

SCORE: 62

COMPLEXITY: High

IMPLEMENTING DIVISION: Planning, Watershed **ESTIMATED PERSONNEL-YEARS (PY):** 1.5

PY RUNNING TOTAL: 1.5

2. Designate Tribal Tradition and Culture, Tribal Subsistence Fishing, and Subsistence Fishing Beneficial Uses in the San Francisco Bay Region

In 2017, the State Water Board adopted Resolution No. 2017-0027. The provisions for this resolution (Final 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) defined three new beneficial uses: Tribal Tradition and Culture (CUL), Tribal Subsistence Fishing (T-SUB), and Subsistence Fishing (SUB). However, the Resolution did not designate these uses for any specific waterbodies in California nor require that the uses be designated. Regional Water Boards are generally responsible for designating beneficial uses for specific waterbodies where the use applies within their respective regions, and this designation occurs through a Basin Planning process.

The first two years of this project were the first phase which prioritized relationship-building and collaboration with tribes and subsistence fishing communities including the following: individual meetings with California Native American Tribes (tribes),

community-based organizations, and community members; tribal summits that bring together multiple tribes if requested; and meetings that bring together multiple community-based organizations. To designate waterbodies with CUL, T-SUB, and SUB beneficial uses, we need more data than are currently available. This data can only come from surveys of community members and traditional ecological knowledge. We need to build relationships with these communities to get the most accurate and meaningful data. To move this project forward more effectively, we prioritized designating the CUL beneficial use in the current phase of this project. Water Board staff have been working with local tribes to document the existence of these uses and their relevant spatial and temporal attributes and gain an understanding of what water quality objectives and implementation policies would be needed to support those uses.

The next phases of this project are to 1) add the CUL, T-SUB and SUB definitions into the Basin Plan as they are already approved and have CEQA completed; 2) designate CUL where geographically appropriate based on our collaboration with tribes; and 3) initiate development of tribal subsistence fishing surveys to inform T-SUB beneficial uses and work toward designating T-SUB where appropriate. This is likely to be completed in the next three years.

Water Board staff will also focus on designating the SUB beneficial use. In FY 24-25, staff are working with community-based organizations to pilot test a survey designed to determine the consumption rates of subsistence fishers in the region. A future step will be to conduct that survey on a broad scale to reach a large number of subsistence fishers. The final designation of waterbodies is likely to take more than three years which aligns with our other complex Basin Plan projects.

RANKING DETAILS

CATEGORY: Update Beneficial Uses **PROPOSED BY:** State Water Board

SUPPORTED BY: Bay Area Clean Water Agencies (BACWA)

SCORE: 59

COMPLEXITY: Medium

IMPLEMENTING DIVISION: Planning

ESTIMATED PERSONNEL-YEARS (PY): 1.0

PY RUNNING TOTAL: 2.5

3. Climate Change and Riparian Area Protection Policy

The project is a Basin Plan amendment that focuses on protecting riparian corridors and streams from climate change related impacts on water quality resulting from the following: increases in temperature; frequency, duration, and severity of droughts; and storm magnitude and frequency. Conservation and enhancement of riparian corridors are essential elements of our climate change priorities. Riparian corridors provide numerous functions that support water quality and beneficial uses including temperature

regulation, carbon sequestration, groundwater recharge, nutrient cycling, water storage, erosion prevention, pollutant filtration, and food web and structural support for aquatic habitats. Climate change creates significant additional challenges for the protection of streams, as these ecosystems will be more susceptible to increases in temperature, and changes in precipitation patterns and surface/subsurface flow interactions, which will in turn lead to alterations in hydrologic and geomorphic processes that support beneficial uses. Riparian areas and streams also provide important dispersal habitat for species undergoing climate-induced range shifts because they span the climatic gradients that species are likely to follow as they track shifting areas of climatic suitability, and they contain microclimates that are significantly cooler and more humid than immediately surrounding areas.

During the past three years of implementing this project, Water Board staff charted a course that included multiple project phases and have begun implementing the first phase, which involves assessing current watershed conditions, reviewing the science pertaining to climate change effects on riparian and stream ecosystems in the San Francisco Bay Area, identifying actions to increase watershed resilience to climate change impacts, and evaluating existing policies to explore regulatory options to protect beneficial uses of riparian corridors and streams from climate change impacts. Water Board staff have also been working with San Francisco Estuary Institute to assess current and future riparian conditions in the Petaluma River watershed.

The second phase will involve working with San Francisco Estuary Institute to: 1) map riparian areas in the San Francisco Bay region; and 2) scale up the science and findings from the Petaluma River watershed project to the whole region. Staff will then develop a Basin Plan amendment to update the text in Chapter 4 to include clear implementation measures to promote the resilience of riparian corridors and streams to climate change impacts in our region.

In view of the staffing level, project scope, and likely level of effort, Water Board staff does not anticipate completing a Basin Plan amendment during this current three-year period.

RANKING DETAILS

CATEGORY: Update Implementation Plans

PROPOSED BY: Water Board **SUPPORTED BY:** Water Board

SCORE: 56

COMPLEXITY: High

IMPLEMENTING DIVISION: Watershed **ESTIMATED PERSONNEL-YEARS (PY):** 1.5

PY RUNNING TOTAL: 4.0

4. Develop Nutrient Water Quality Attainment Strategy for San Francisco Bay

The Water Board adopted an NPDES permit (Final Order R2-2024-0013) calling for a 40 percent nitrogen load reduction for municipal wastewater facilities on July 10, 2024. The permit includes water quality based effluent limitations that must be achieved within 10 years (October 1, 2034). The Water Board also adopted a Resolution to Identify and Consider Regulatory Mechanisms to Extend Compliance Schedules for Nutrient Effluent Limitations (Resolution 2024-0014). In the resolution, the Board directs staff to explore regulatory mechanisms to provide more time for compliance via innovated technologies and multi-benefit projects that reduce nutrient loads (e.g., recycled water and nature-based solutions for nutrient reduction). Based on this direction, staff anticipate a need to develop a water quality attainment strategy (WQAS) that describes and prioritizes, for implementation, the regulatory measures that could provide more time to achieve the water quality based effluent limitations.

This 1.5 PY project would involve work over the next three years to build the scientific foundation and assemble other elements to evaluate regulatory measures to be included in the WQAS for nutrient management in SF Bay. The WQAS would draw from the efforts of the Nutrient Management Strategy to develop nutrient-related scientific understanding for the Bay, describe findings to date, and describe the efforts to reduce nutrients through the NPDES wastewater permit.

RANKING DETAILS

CATEGORY: Update Implementation Plans

PROPOSED BY: Bay Area Clean Water Agencies (BACWA), EOA, Inc. **SUPPORTED BY:** Bay Area Clean Water Agencies (BACWA), EOA, Inc.

SCORE: 50

COMPLEXITY: High

IMPLEMENTING DIVISION: Planning, NPDES **ESTIMATED PERSONNEL-YEARS (PY):** 1.5

PY RUNNING TOTAL: 5.5

5. Addition of Commercial and Sport Fishing Beneficial Uses to Lakes

This project entails adding Commercial and Sport Fishing (COMM) where the COMM beneficial use is determined to apply. Many lakes and reservoirs in the Region already have this beneficial use designation but we are aware that this designation is missing from some water bodies with active recreational fishing. The need to designate the COMM use for these waterbodies was identified as part of the ongoing work on the Statewide Mercury in Reservoirs TMDL and was highlighted as a concern in the 2024 Integrated Report. The COMM beneficial use is considered impaired when high

Appendix B Basin Plan Triennial Review Staff Report

contaminant concentrations make fish unsafe for human consumption. Other waterbodies may also be reviewed for the COMM beneficial use as part of this project.

RANKING DETAILS

CATEGORY: Update Beneficial Uses

PROPOSED BY: Water Board SUPPORTED BY: Water Board

SCORE: 31

COMPLEXITY: Medium

IMPLEMENTING DIVISION: Planning

ESTIMATED PERSONNEL-YEARS (PY): 0.3

PY RUNNING TOTAL: 5.8

6. Clarify Turbidity Water Quality Objective

The Basin Plan's turbidity water quality objective is difficult to interpret:

Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases from normal background light penetration or turbidity relatable to waste discharge shall not be greater than 10 percent in areas where natural turbidity is greater than 50 NTU.

This language is often subject to misinterpretation when determining whether dredging operations are negatively impacting water quality in the Bay. The language can be improved for clarity as well as consistency with turbidity objectives found in the Basin Plans from other regions.

The project would also revise the objective to state also that waste discharges should not increase normal background light penetration and clarify how to regulate discharges affecting turbidity under 50 NTU. Because improving this language would require only minor clarifying changes, this project could also be accomplished as part of another Basin Plan project.

RANKING DETAILS

CATEGORY: Update Water Quality Objective

PROPOSED BY: Water Board

SUPPORTED BY: Water Board, Bay Area Clean Water Agencies (BACWA)

SCORE: 28

COMPLEXITY: Medium

IMPLEMENTING DIVISION: Planning, NPDES **ESTIMATED PERSONNEL-YEARS (PY):** 0.5

PY RUNNING TOTAL: 6.3

7. Consider Incorporating Clean Water Act Section 304(a) Criteria into the Basin Plan

Federal regulations at 40 CFR 131.20(a) require states to review their water quality standards in comparison to Clean Water Act Section 304(a) criteria as new information becomes available. Water quality objectives in Basin Plan Chapter 3 or in effect under the federal California Toxics Rule (2000) that are not as protective as the U.S. EPA nationally-recommended criteria need to be updated. States should consider adopting new or revised 304(a) criteria as objectives as part of the Triennial Review process.

For example, U.S. EPA promulgated new and revised human heath water quality criteria in 2015 (Federal Register 80(124):36986-36989). This ruling established new water quality criteria for seven pollutants that are not in the California Toxics Rule (Arsenic, Chloroform, 3-Methyl-4-Chlorophenol, 1,1,1-Trichloroethane, 1,2,4-Trichlorobenzene, Selenium, and Zinc). The 2015 ruling contains revised water quality criteria that are more stringent than the California Toxics Rule for 64 pollutants. In addition, the 2015 ruling contains revised water quality criteria that are less stringent than the California Toxics Rule for 19 pollutants.

This project would also include ensuring that the Basin Plan's objective and implementation provisions (e.g., for NPDES permits) are consistent with the magnitude and averaging period of U.S. EPA's acute and chronic saltwater criteria for un-ionized ammonia as well as U.S. EPA's 2013 recommended freshwater criteria.

This candidate project would update the Basin Plan to incorporate, as necessary, the revised 304(a) criteria. The Water Board has the authority to incorporate new or updated WQOs into its Basin Plan as needed to adequately protect beneficial uses. However, for pollutants that are part of the CTR, further action by U.S. EPA to depromulgate the CTR criterion may be necessary in situations where the updated WQO is less stringent than the CTR criterion. Moreover, it is often the case that adopting any new or revised 304(a) criteria is more appropriately and efficiently accomplished by the State Water Board because the criteria should apply statewide rather than to a single region.

RANKING DETAILS

CATEGORY: Update Water Quality Objectives

PROPOSED BY: U.S. EPA SUPPORTED BY: U.S. EPA

SCORE: 27

COMPLEXITY: Low

IMPLEMENTING DIVISION: Planning

ESTIMATED PERSONNEL-YEARS (PY): 4.0

PY RUNNING TOTAL: 10.3

8. Evaluate and Refine Shellfish Harvesting Beneficial Use

Most segments of San Francisco Bay are currently designated appropriate for commercial and recreational shellfish uses (SHELL). There are currently no commercial shellfish beds in San Francisco Bay. However, there are commercial shellfish beds in the region in Tomales Bay and along the coast at Point Reyes National Seashore. The Basin Plan identifies water quality objectives for shellfishing using a bacterial indicator, measured as fecal coliforms or total coliforms. The objectives are stringent because they are based on protection of commercial shellfish beds for human health consumption. When bacterial indicator data are collected and assessed to determine if water bodies are meeting water quality standards, waters may be placed on the impaired waters list if they are not meeting the stringent shellfish standards even if no commercial or recreational shellfishing occurs.

This project would involve refining the spatial and temporal patterns of shellfish harvesting uses, particularly in San Francisco Bay and its marinas. The project may also include refinement of the beneficial use definition to distinguish between commercial and recreational shellfishing as well as the collection of information to support a reference/natural source implementation option for SHELL. The project would result in a Basin Plan amendment to refine the SHELL beneficial use in specific water bodies targeted in San Francisco Bay.

RANKING DETAILS

CATEGORY: Update Beneficial Uses

PROPOSED BY: Water Board

SUPPORTED BY: Water Board, San Francisco Public Utilities Commission (SFPUC), Bay Area Clean

Water Agencies (BACWA), EOA, Inc.

SCORE: 26

COMPLEXITY: Medium

IMPLEMENTING DIVISION: Planning

ESTIMATED PERSONNEL-YEARS (PY): 1.0

PY RUNNING TOTAL: 11.3

9. Lake Merced pH Site-Specific Objective Project

Lake Merced is a small, eutrophic (nutrient-enriched) urban lake in San Francisco that is currently listed as impaired by low dissolved oxygen and high pH. Daly City is developing a capital project to address storm-related flooding that currently occurs in the Vista Grande Drainage Basin. The project would capture existing stormwater and authorized non-stormwater runoff that is currently conveyed to the Pacific Ocean and use the water to augment water levels in Lake Merced. The increased water levels and other associated lake management efforts (e.g., routing water into a treatment wetland prior to discharge into Lake Merced) may offer some water quality improvements but not enough to remedy the impairments based on existing water quality objectives. This Basin Plan project would explore a site-specific water quality standards action (Chapter

3) for pH based on water quality factors unique to Lake Merced. There are USEPA freshwater criteria having a range of 6.5 to 9, which is a slightly larger range than the current Basin Plan objective range of 6.5 to 8.5. The project may also memorialize Lake Merced water quality management efforts in Chapter 4 of the Basin Plan.

RANKING DETAILS

CATEGORY: Update Water Quality Objectives

PROPOSED BY: City of Daly City SUPPORTED BY: City of Daly City

SCORE: 25

COMPLEXITY: Medium

IMPLEMENTING DIVISION: Planning, NPDES **ESTIMATED PERSONNEL-YEARS (PY):** 1.0

PY RUNNING TOTAL: 12.3

10. Clarify Implementation Requirements for Municipal Supply and Agricultural Supply Water Quality Objectives

The Basin Plan should be revised to update the primary and secondary maximum contaminant levels (MCLs) listed in Table 3-5 and clarify appropriate implementation measures for the secondary MCLs. Basin Plan section 3.3.22 prospectively establishes the primary and secondary MCLs specified in Title 22 of the California Code of Regulations as municipal supply water quality objectives. U.S. EPA developed the secondary MCLs as non-mandatory drinking water standards to guide public water systems in managing drinking water for aesthetic considerations, such as taste, color, and odor; concentrations above secondary MCLs do not necessarily present human health risks. When these objectives were originally included in the Basin Plan, the administrative record provided some background information about their implementation. The MUN and AGR objectives were "meant to be applied at the tap because the level of water treatment or the quality/quantity of blending water could vary significantly. If necessary, exemptions from achieving these objectives could be granted if a consistent level of treatment or blending could be demonstrated." Finally, the project would consider an update to allow analysis of samples passed through a 1.5-micron filter to account for the common filtering process used in drinking water systems.

The Basin Plan should also clarify appropriate implementation measures for the agricultural supply water quality objectives listed in Table 3-6. The Basin Plan does not currently explain how to implement "threshold values" versus "limits." The update should clarify that the objectives in Table 3-5 are implemented as long-term averages (unlike aquatic life objectives).

RANKING DETAILS

CATEGORY: Update Water Quality Objectives

PROPOSED BY: Water Board

Appendix B Basin Plan Triennial Review Staff Report

SUPPORTED BY: Water Board, Bay Area Clean Water Agencies (BACWA)

SCORE: 21

COMPLEXITY: Medium

IMPLEMENTING DIVISION: Planning, NPDES **ESTIMATED PERSONNEL-YEARS (PY):** 0.5

PY RUNNING TOTAL: 12.8

11. Santa Clara Valley Water Contact Recreation (REC-1) Standards Study

The contact recreation (REC-1) beneficial use is defined in chapter 2 of the Basin Plan as follows:

Uses of water for recreational activities involving body contact with water where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, whitewater activities, fishing, and uses of natural hot springs.

Section 101(a)(2) of the Clean Water Act states that, as an interim goal, water quality should provide for the protection and propagation of fish, shellfish and **recreation** in and on the water, wherever attainable. The Water Quality Standards regulations effectively establish a "rebuttable presumption" that the CWA 101(a)(2) uses are attainable and therefore must be assigned to a water body, unless a State or Tribe affirmatively demonstrates, with appropriate documentation, that such uses are not attainable¹. Consistent with this rebuttable presumption, the REC-1 use has been assigned to nearly all the water bodies in the Basin Plan.

This candidate project consists of an evaluation of the REC-1 designations for creeks and channels in Santa Clara County. The first phase of the project would be to identify scientific studies and technical data collection activities necessary for the review of REC-1 designations in these creeks and channels. The purpose of these studies and data collection activities would be to determine if there is compelling evidence that the REC-1 use is not attainable in specific waterbodies in Santa Clara Valley. Subsequent project phases may involve a review of water quality objectives to protect the REC-1 use as well as implementation strategies to achieve these water quality objectives.

The evaluation would likely require the participation of Water Board staff, U.S. EPA staff, Santa Clara Valley Urban Runoff Pollution Prevention Program staff, impacted permittees in Santa Clara Valley, environmental advocacy groups, and other interested stakeholders. If the project results in information that affirmatively demonstrates that the

¹ Key Concepts Module 2: Use (Water Quality Standards: Regulations and Resources). https://www.epa.gov/wqs-tech/key-concepts-module-2-use

Appendix B Basin Plan Triennial Review Staff Report

REC-1 use is not attainable in certain waterbodies, a Basin Plan amendment would be developed to modify the REC-1 designations and associated water quality objectives where appropriate as well as establish corresponding implementation measures.

RANKING DETAILS

CATEGORY: Update Beneficial Uses

PROPOSED BY: Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) **SUPPORTED BY:** Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP)

SCORE: 12

COMPLEXITY: High

IMPLEMENTING DIVISION: Planning

ESTIMATED PERSONNEL-YEARS (PY): 1.5

PY RUNNING TOTAL: 14.3