Appendix B

Staff Report

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California Regional Water Quality Control Board

San Francisco Bay Region

Triennial Review 2021 Staff Report

November 2021

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

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Documents also are available at our website:

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

Contents

1. Introduction

This Staff Report presents the results of the 2021 Triennial Review of the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan). The report includes a listing of proposed Basin Planning 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.

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, implementation plans, and plans and policies. The review results in a work plan for future Basin Plan amendments. The review includes solicitation of public comments on possible TMDLs, but Basin Plan amendment projects to develop TMDLs are not included in the work plan. The review is required under section 303(e)(1) of the federal Clean Water Act and section 13240 of the California Water Code.

During the Triennial Review process, Water Board staff 1) considers public comments on water quality issues that may require investigation; 2) develops a prioritized list of Basin Planning projects that may be pursued by Water Board staff over the next three years; and 3) presents 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 often 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 2021, 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 Planning projects for public review. This effort included: review and update of the list of priority Basin Planning 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 "Brief Issue Descriptions" document, describing candidate projects. The 15 projects included in this document are shown in Table 1. Based on public input, we updated some of these projects, and we added additional projects. All candidate projects are described in more detail and in descending rank order in Appendix B.

On April 30, 2021, the public process for the Triennial Review formally began with the distribution of a public notice for a Triennial Review workshop. The notice specified a public comment period (April 30 – July 8, 2021) for submission of written comments, communicated that written materials ("Brief Issue Descriptions") would also be posted on April 30 (more than 45 days in advance of the workshop), and announced a Triennial Review public workshop on June 21, 2021. Appendix A includes a copy of the "Notice of Public Workshop and Solicitation of Public Comment" for the 2021 Basin Plan Triennial Review and the summary of the discussion from the workshop.

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 Planning projects to pursue during the upcoming three-year period.

Formal completion of the Triennial Review requires the Water Board to adopt a resolution approving the Triennial Review of the Basin Plan along with a prioritized list of Basin Planning 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 Board Staff at June 2021 Workshop

Update Beneficial Uses
2.1 Designate Tribal Tradition and Culture, Tribal Subsistence Fishing, and Subsistence Fishing Beneficial Uses in the San Francisco Bay Region
2.2 Modify Groundwater Sub-Basin Boundaries
Update Water Quality Objectives
3.1 Clarify Implementation Requirements for Municipal Supply and Agricultural Supply Water Quality Objectives
3.2 Consider incorporating Clean Water Act section 304(a) criteria into the Basin Plan
3.3 Develop Flow Criteria for Selected Bay Area Streams and Rivers
3.4 Nutrient Management Strategy and Dissolved Oxygen Objectives in San Francisco Bay
3.5 Review Un-ionized Ammonia Water Quality Objectives for San Francisco Bay and freshwaters
3.6 Temperature Limits to Protect Salmonids
3.7 Clarify Turbidity Water Quality Objective
Update Implementation Plans
4.1 Dredge and Fill Policy Update
4.2 Environmental Screening Levels (ESLs) for Groundwater Cleanups
4.3 Regional Stream Protection Policy
4.4 Update Cyanide Dilution Credits
Update Plans and Policies
5.1 Climate Change and Water Resources Policy
Essential Basin Planning Activities
6.1 Editorial Revisions, Minor Clarifications, or Corrections

3. Summary of Public Participation Process

The public, both in written comments and those provided during the public workshop, voiced both support for projects identified by Water Board staff and/or suggested new potential projects for staff to consider. Many of the public comments encouraged the Water Board to continue working on candidate projects already underway. These comments are summarized below.

Workshop attendees and commenters included private citizens and representatives of a wide range of different organizations. Parties who participated in the workshop or who provided comments during the solicitation process are listed in Table 2 below.

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 2021 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 April 8, 2021 to 27 tribes. When staff received an updated list of tribes from the Native American Heritage Commission, another round of letters and e-mails was sent on May 4, 2021. Out of the 37 tribes that received letters and e-mails, four responded with written comments in support of the project to "Designate Tribal Tradition and Culture, Tribal Subsistence Fishing, and Subsistence Fishing Beneficial Uses in the San Francisco Bay Region."

Table 2. Triennial Review Workshop Participants and Commenters

Organization/Participant	Submitted Comments	Attended Workshop
Alameda County Water District (ACWD), Leonard Ash, Rachel Mellinger, Ed Stevenson	✓	✓
Alameda Countywide Clean Water Program (ACCWP), Jim Scanlin		✓
Bay Area Clean Water Agencies (BACWA), Mary Cousins, Lorien Fono	✓	✓
Bayview Hunters Point Community Advocates, J. Michelle Pierce	✓	
California Indian Environmental Alliance (CIEA), Sherri Norris, Joel Sedano, Alexander Tavizon	✓	✓
California Marine Affairs and Navigation Conference (CMANC), Jim Haussener		✓

Organization/Participant	Submitted Comments	Attended Workshop
Central Contra Costa Sanitary District (CCCSD) Blake Brown		✓
City of Palo Alto, Diego Martinez, Karin North	✓	✓
City of Pittsburg, Zuna Barker		✓
City of Santa Clara, Ryan Harrison		✓
City of Sunnyvale, Cameron Kostingen Mumper, Melody Tovar		✓
Clean Water Action, Andria Ventura	✓	✓
EOA Inc., Tom Hall		✓
Fairfield Suisun Sewer District, Nicole Van Aken		✓
Geosyntec Consultants, Lisa Welsh		✓
Living Rivers Council (LRC) and Institute for Conservation, Advocacy, Research and Education (ICARE) Napa, Chris Malan	✓	✓
Northgate Environmental Management, Axel Rieke		✓
Gabriel Popescu, State of California		✓
San Francisco Baykeeper, Shelby Coyne, Ben Eichenberg, Jonathan Rosenfeld, Ian Wren	✓	✓
San Francisco Public Utilities Commission, Anna Fedman, Jowin Jung		✓
Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP), Chris Sommers	✓	✓
Sierra Club and County of Santa Clara, Katja Irvin		✓
Solano County, Allen Calder, Nancy Nelson		✓
Zone 7 Water Agency, Carol Mahoney, Elke Rank		✓

3.2. Public Input in Support of Candidate Projects

Many commenters supported various projects presented by Water Board staff in the "Brief Issue Descriptions" document. Those projects receiving one or more supporting comments are discussed below along with relevant concerns or clarifying comments, if any, expressed by the commenter.

2.1 Designate Tribal Tradition and Culture, Tribal Subsistence Fishing, and Subsistence Fishing Beneficial Uses in the San Francisco Bay Region. San Francisco Baykeeper, The Bay Institute, Clean Water Action, California Indian Environmental Alliance, and Bayview Hunters Point Community Advocates support this project to designate new tribal and subsistence fishing uses to applicable waters in the region.

2.2 Modify Groundwater Sub-Basin Boundaries. ACWD wrote in support of this project.

3.1 Clarify Implementation Requirements for Municipal Supply and Agricultural Supply Water Quality Objectives. ACWD supports this project provided the MUN and AGR objectives continue “to be applied at the tap", thus allowing for various levels of blending or water treatment within a larger system. BACWA also support this project.

3.3 Develop Flow Criteria for Selected Bay Area Streams and Rivers. Living Rivers Council/ICARE, San Francisco Baykeeper, and The Bay Institute support this project. ACWD also supports the project but requests that any in-stream flow criteria be developed in conjunction with existing scientific studies characterizing the Alameda Creek watershed and that any resulting Basin Plan amendment not contradict ACWD's previously issued Biological Opinions and/or CDFW operating agreements.

3.4 Nutrient Management Strategy and Dissolved Oxygen Objectives in San Francisco Bay. San Francisco Baykeeper, The Bay Institute, City of Palo Alto, ACWD, and BACWA support this project.

3.6 Temperature Limits to Protect Salmonids. The Bay Institute and ACWD support this project. ACWD’s support is conditioned on the limits being protective of critical local water supply and that the criteria are developed in conjunction with existing scientific studies characterizing salmonids in the Alameda Creek watershed and are consistent with ACWD’s previously issued Biological Opinions and/or CDFW operating agreements.

3.7 Clarify Turbidity Water Quality Objective. ACWD and BACWA support this project.

4.2 Environmental Screening Levels (ESLs) for Groundwater Cleanups. ACWD supports this project to update the Basin Plan with a description of the tiered decision process used to determine relevant exposure pathways and appropriate site cleanup levels using environmental screening levels (ESLs).

4.4 Update Cyanide Dilution Credits. The City of Palo Alto and BACWA support this project to update cyanide dilution credits for discharges that were not included in the 2007 cyanide Basin Plan amendment.

5.1 Climate Change and Water Resources Policy. ACWD, City of Palo Alto, and BACWA support this project. These three commenters also offered several recommendations for additional elements for this project, including evaluation of: impacts to coastal aquifers; mobilization of contaminants from near-shore areas; brine discharges; and use of wastewater, stormwater, and biosolids in marsh restoration.

6.1 Editorial Revisions, Minor Clarifications, or Corrections. The City of Palo Alto supports adding to the Basin Plan unnamed waterbodies that receive discharges, particularly the outfall channel where the Palo Alto wastewater plant discharges to Lower South Bay.

3.3. Other Potential Projects Proposed by Commenters

Public comments covered a wide range of potential new projects and Basin Plan updates. 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, public input, and State Water Board staff input resulted in a total of 16 candidate Basin Planning projects to be considered and ranked during the 2021 Triennial Review. The ranking process is described in section 4 below, and summaries of all ranked projects are included in Appendix B.

In some cases, new projects requested by commenters were not included in the Triennial Review ranking exercise. In the following table, we summarize the additional candidate projects suggested by stakeholders and explain the resolution to the suggestion.

Table 3. Additional Candidate Projects Suggested by Commenters

Entity	Topic	Resolution
The Bay Institute and San Francisco Baykeeper	Both commenters urge the Regional Board to revise the existing numerical water quality objectives and program of implementation for selenium in order to protect beneficial uses.	The U.S. EPA is currently working on both revised selenium tissue criteria that will apply to San Francisco Bay and revised selenium criteria for inland freshwaters. U.S. EPA is currently engaging U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration (NOAA) on the Endangered Species Act consultations for these criteria. It would not be appropriate for the Water Board to develop Bay or freshwater selenium objectives at this time. When the U.S. EPA criteria are promulgated, the Water Board may consider them for adoption into the Basin Plan along with relevant implementation provisions. EPA has recently asked the Water Board not to proceed with developing selenium freshwater objectives for our

Entity	Topic	Resolution
		region because of their ongoing work on these criteria.
Living Rivers Council	The Water Board should develop a groundwater protection strategy for Napa groundwater basins integrated with groundwater planning pursuant to the Sustainable Groundwater Management Act (SGMA).	The intent of SGMA is to develop a groundwater protection strategy for groundwater basins through identification of undesirable affects and allow local groundwater sustainability agencies to develop plans (a "strategy") to adequately address/avoid impacts. One of those undesirable affects identified by SGMA is surface water depletion. Staff in our Groundwater Protection Division is working with Napa County to follow development of the Napa SGMA Groundwater Sustainability Plan (GSP), and we are poised to review it this September and develop our comments. Our Groundwater Protection Division staff is also looking at the salt and nitrate conditions in Napa groundwater to understand if we should be pushing for a full salt and nutrient management plan (SNMP). Our staff working on Napa groundwater is also participating with SGMA plan development and plans to comment on the draft plans before they are considered by the Department of Water Resources. For these reasons, there is not an immediate need to develop a candidate Basin Planning project. However, at some future point, our Basin Plan could be updated to describe the County's SGMA GSP strategy, once approved, and also updated to memorialize the SNMP if one is necessary.
City of Palo Alto	Palo Alto remains interested in the project to ***Develop Numeric Nutrient Endpoints in Freshwater Streams and Estuaries*** as well as the project to ***Use Wastewater to Create, Restore, and Enhance Wetlands***.	Staff continue to be engaged in the nutrient numeric endpoint related projects for freshwater streams and estuaries, but there are not Basin Planning needs for these projects anticipated over the next three years. State Water Board is leading a statewide effort to manage nutrients in streams called the Biostimulatory Substances Objective and Program to Implement Biological Integrity. We will collaborate with State Water Board staff and the public as part of that statewide effort. If the result of this statewide effort directs Regional Water Boards

Entity	Topic	Resolution
		to modify their Basin Plans, we will add a freshwater stream nutrient project to a future Triennial Review. Regarding numeric endpoints for streams, we proposed a project entitled "Nutrient Management Strategy and Dissolved Oxygen Objectives" which includes the consideration of whether numeric nutrient objectives are necessary for San Francisco Bay. We have also included the candidate project (from the 2018 Triennial Review project list) related to using wastewater for wetlands creation, restoration, and enhancement, and this project will be ranked.
ACWD	ACWD recommends the Regional Board create a project focused on the identification of potential PFAS sources specific to the San Francisco Bay Basin in order to address the water quality planning needs of the Region.	There is no need for a basin planning project on tracking and identifying PFAS sources. We are already working with the State Water Board on a statewide effort to evaluate PFAS sources (see this website for information), which to date have included airports, landfills, metal plating facilities, fuel refinery and storage facilities, and municipal wastewater treatment plants. In addition, we have formed an interdivisional staff team staff to identify and evaluate the possible presence of PFAS at soil and groundwater cleanup sites, including Department of Defense facilities, in the region. Also, through the San Francisco Bay Regional Monitoring Program, we have an ongoing effort to evaluate PFAS occurrence in the Bay and in sources of discharges to the Bay, including municipal wastewater and urban stormwater. We are also working with BACWA on identifying sources of PFAS in municipal wastewater.
SCVURPPP	SCVURPPP recommends a 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 2021 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. No projects that would weaken protection or restoration of beneficial uses were considered.

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 Planning 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 Planning 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 4.

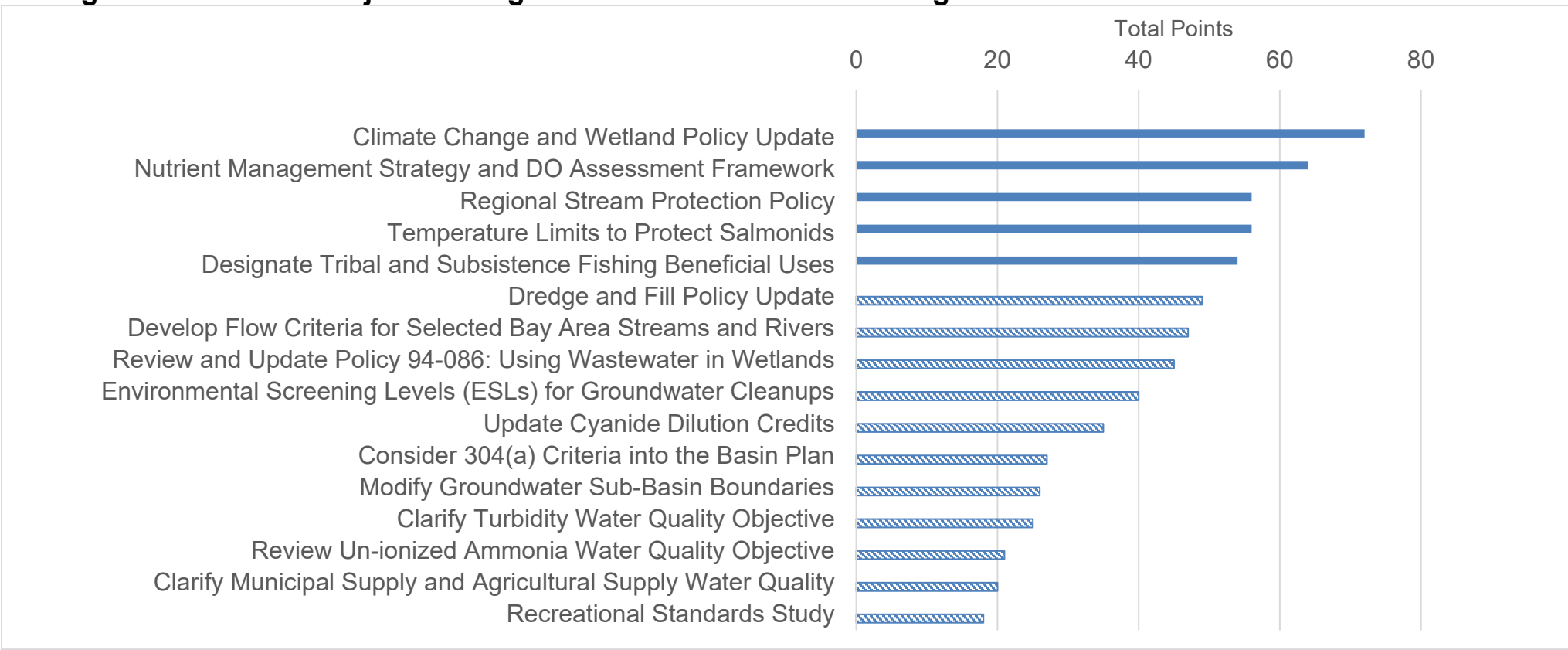
6. Priority Ranking for TMDL Development

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:

- San Francisco Bay Beaches Bacteria TMDL (additional beach listings)
- Pescadero Marsh Dissolved Oxygen TMDL
- Statewide Mercury Control Program in Reservoirs

TMDL projects 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.

Figure 1. Basin Plan Project Ranking Scores and Generalized Rankings



The bars on this page reflect the points allocated based on the Project Ranking Criteria laid out in Section 4. The following table shows the points for each project and criterion in more detail. The solid fill indicates that these projects received enough points to be prioritized for this Triennial Review.

Table 4. Rank-Ordered Scoring for Individual Projects

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
1	Climate Change and Wetland Policy Update	15	15	8	6	10	3	0	5	5	5	72
2	Nutrient Management Strategy and Dissolved Oxygen Assessment Framework	10	5	10	10	10	0	5	5	4	5	64
3	Regional Stream Protection Policy	15	10	0	5	10	3	0	3	5	5	56
4	Temperature Limits to Protect Salmonids	15	10	5	5	5	0	3	5	3	5	56
5	Designate Tribal and Subsistence Fishing Beneficial Uses	20	0	10	5	5	5	3	3	3	0	54
6	Dredge and Fill Policy Update	10	10	0	10	5	5	0	0	5	4	49
7	Develop Flow Criteria for Selected Bay Area Streams and Rivers	15	10	8	5	0	3	2	1	3	0	47
8	Review and Update Policy 94-086: Using Wastewater in Wetlands	10	10	3	5	4	2	0	4	4	3	45

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
9	Environmental Screening Levels (ESLs) for Groundwater Cleanups	10	0	3	5	10	0	0	2	5	5	40
10	Update Cyanide Dilution Credits	5	0	5	5	8	0	0	5	5	2	35
11	Consider 304(a) Criteria into the Basin Plan	10	0	0	5	2	0	5	0	5	0	27
12	Modify Groundwater Sub-Basin Boundaries	5	0	3	3	2	3	0	3	2	5	26
13	Clarify Turbidity Water Quality Objective	10	0	5	0	0	0	0	0	5	5	25
14	Review Un-ionized Ammonia Water Quality Objective	10	0	0	0	0	0	3	0	5	3	21
15	Clarify Municipal Supply and Agricultural Supply Water Quality	5	0	5	0	0	0	0	2	5	3	20
16*	Recreational Standards Study	5	0	3	0	0	3	0	5	2	0	18

*There are 16 projects in this list because the “Editorial Revisions, Minor Clarifications, or Corrections” project was recategorized as essential Basin Planning activity and therefore didn’t need to be ranked.

7. Available Resources

Non-TMDL Basin Plan resources for the San Francisco Bay Region consist of 2 personnel-years (PY). Available Planning Division staff over the next three years 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 Planning projects.

These non-discretionary activities fall into three categories. First, we intend to dedicate a portion of Basin Planning staff resources to attend to Planning Division projects promoting environmental justice. Second, 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, Statewide Mercury Control Program for Reservoirs). Finally, 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.

For work planning purposes, low complexity Basin Planning 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 Planning 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 Planning projects, and thus additional projects may be considered during any given year.

8. Proposed Basin Planning Projects

Based on the ranking criteria and available resources, as described in previous sections of this staff report, the projects shown in Table 5 comprise staff's recommendation for the Basin Planning work plan for the San Francisco Bay Region for the next three years. 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 Planning 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 5. High Priority Basin Planning Projects Versus Available Resources

Project	Required PY	Cumulative PY
Climate Change and Wetland Policy Update	2.0	2.0
Nutrient Management Strategy and Dissolved Oxygen Assessment Framework	1.0	3.0
Regional Stream Protection Policy	0.5	3.5
Temperature Limits to Protect Salmonids	0.5	4.0
Designate Tribal Tradition and Culture, Tribal Subsistence Fishing, and Subsistence Fishing Beneficial Uses in the San Francisco Bay Region	1.0	5.0

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 11th) 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 recent 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 the Basin Plan.

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: PUBLIC NOTICE AND MEETING SUMMARY OF PUBLIC WORKSHOP

Notice Date: April 30, 2021

NOTICE OF PUBLIC WORKSHOP AND SOLICITATION OF PUBLIC COMMENT

2021 TRIENNIAL REVIEW OF THE WATER QUALITY CONTROL PLAN FOR THE SAN FRANCISCO BAY BASIN

The California Regional Water Quality Control Board, San Francisco Bay Region (Water Board) is initiating the triennial review process for the Water Quality Control Plan, San Francisco Bay Basin (Basin Plan). 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 purpose of the triennial review is to examine and update the focus of Water Board planning efforts, including TMDL projects. Section 13240 of the Porter-Cologne Water Quality Control Act and section 303(c)(1) of the federal Clean Water Act require a review of the Basin Plan at least once each three-year period to keep pace with changes in regulation, new technologies, policies, and physical changes within the region.

NOTICE IS HEREBY GIVEN that a public workshop on the Basin Plan Triennial Review will be held:

DATE **Monday, June 21, 2021**
TIME 10 AM to 12 noon
LOCATION Virtual meeting via Zoom.
https://waterboards.zoom.us/j/94345457221?pwd=NU50ZVo4R2c1Smo0Yk1NR2gzWldaQT09

Meeting ID: 943 4545 7221
Passcode: 389357
One tap mobile:
+16699009128,,94345457221#,,,,*389357# US (San Jose)

STAFF CONTACT Sami Harper
1515 Clay Street, Suite 1400
Oakland, CA 94612
Phone: (510) 622-2415
E-mail: Samantha.Harper@waterboards.ca.gov

The Water Board is responsible for reviewing the Basin Plan to identify necessary additions or those portions requiring modification and adopt standards as appropriate. The review includes a public workshop and a Water Board hearing later this year to allow the public an opportunity to identify Basin Planning issues for the Water Board to consider.

MATERIALS

Water Board staff have prepared an initial list of candidate Basin Planning issues for inclusion in the Water Board's triennial review workplan. These candidate issues include updates to beneficial uses, water quality objectives, implementation plans, and policies. The document containing brief descriptions of currently identified triennial review issues will be available for download on April 30, 2021 here:

http://www.waterboards.ca.gov/sanfranciscobay/basin_planning.shtml#triennialreview

SUBMISSION OF WRITTEN COMMENTS

We solicit input from interested parties to assist staff to identify and prioritize Basin Plan amendment projects that will best address the water quality planning needs of our region. It is important to identify the scope, timing and critical nature of potential projects, as the Water Board is limited in terms of the staff resources that are available to complete the projects. Written comments can be submitted via regular or electronic mail and are due by **5 PM on July 8, 2021**.

After public input is received, Water Board staff will prepare a Staff Report containing a prioritized list of Basin Planning projects. We will make these materials available for formal public comment as part of the public process in advance of a Water Board hearing taking place this fall. Ultimately, the Water Board will adopt, by resolution, the priority list of Basin Planning projects to be pursued.

PROCEDURAL MATTERS

The meeting will be held virtually. Individuals who require special accommodations are invited to contact Executive Assistant Guy Gutterman, (510) 622-2399, Guy.Gutterman@Waterboards.ca.gov, at least five (5) working days before a meeting. TTY users may contact the California Relay Service at 1-800-735-2929 or voice line at 1-800-735-2922.

TRIENNIAL REVIEW WORKSHOP SOLICITATION PERIOD

Comment Period Opens	Friday, April 30, 2021
Public Workshop	Monday, June 21, 2021
Final date for Submitting Comments	Thursday July 8, 2021
Board Adoption Hearing	Fall 2021

PUBLIC WORKSHOP AGENDA (June 21, 2021)

1. Introductions — All
2. What is a triennial review? — Sami Harper
3. Priority projects from last triennial review — Richard Looker
4. Water Board staff review of issue areas — Sami Harper
    a. Update of beneficial uses
    b. Update of water quality objectives
    c. Updates to implementation plan
    d. Updates to plans and policies
5. Comments from workshop attendees and discussion — All

DATE Monday, June 21, 2021
TIME 10 AM to 12 noon
LOCATION Virtual meeting via Zoom
https://waterboards.zoom.us/j/94345457221?pwd=NU50ZVo4R2c1Smo0Yk1NR2gzWldaQT09

Meeting ID: 943 4545 7221
Passcode: 389357
One tap mobile:
+16699009128,,94345457221#,,,,*389357# US (San Jose)

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TRIENNIAL REVIEW WORKSHOP SOLICITATION PERIOD

Comment Period Opened	Friday, April 30, 2021
Public Workshop	Monday, June 21, 2021
Final date for Comment Submission	Thursday July 8, 2021
Board Adoption Hearing	Fall 2021

STAFF CONTACT

Sami Harper, (510) 622-2415, Samantha.Harper@waterboards.ca.gov
Richard Looker, (510) 622-2451, Richard.Looker@waterboards.ca.gov

Meeting Summary of Triennial Basin Plan Workshop

Date: June 21, 2021, 10 am – 11:25 am on Zoom

This is a summary of the questions and comments received from the public both expressed orally and written in the chat. These are not verbatim quotes, but these notes should reflect what was said during the meeting.

Questions and Answers

1. **Jim Haussener (California Marine Affairs and Navigation Conference – CMANC):** When will the "final" listing be available for public comment? Will this be before or after the July 8th comment deadline?
    a. **Kevin Lunde (Water Board):** Unranked list available online. The public has an opportunity to propose new candidate projects, comment on the scope of the projects on that list and help rank the list by expressing support during this meeting. We will release the final list before the board hearing.
2. **Tom Hall (EOA) and Chris Sommers (Santa Clara Valley Urban Runoff Pollution Prevention Program – SCVURPPP):** Which project ranking criteria will be used for this Triennial Review?
    a. **Richard Looker (Water Board):** The criteria will be similar to criteria used for the 2018 Triennial Review. There are new categories, such as whether the project has a climate change nexus. The reconfigured point total eliminated two 2018 categories: low technical complexity and low controversy.
    b. The ranking criteria can be found on our website under the 2021 Triennial Review: https://www.waterboards.ca.gov/sanfranciscobay/basin_planning.html
    c. **Kevin Lunde:** The criteria shouldn't change your input. This workshop is the chance to give your input. We want to see your support or opposition for different projects.
3. **Andria Ventura (Clean Water Action):** Can you clarify why it only lists documenting tribal uses as opposed to documenting non-tribal sub fishing, tribal sub fishing, and tribal cultural uses?
    a. **Kevin Lunde:** We are looking at all three beneficial uses in the project description, not just the tribal uses.
4. **Anna Fedman (San Francisco Public Utilities Commission – SFPUC):** Can you please show the slide of "Updated Plans and Policies" again? Can you give more context to the projects that appear here? Are these already completed?
    a. **Richard Looker:** That slide references the TMDL list of projects we are currently working on. This is an opportunity to weigh in on those as well.
5. **Mary Cousins (Bay Area Clean Water Agencies – BACWA):** Does the description in the first part of the proposed Basin Plan amendment (BPA) on

climate change cover the BPA that is expected by early 2022? Is that BPA going to capture everything or is there going to be more than one BPA?

a. **Sami Harper (Water Board):** There will be more than one BPA. The scope of future amendments is less clear.

6. **Chris Sommers:** For the temperature project, is it just a review of existing information or conducting actual study?
    a. **Kevin Lunde**: This project is a repeat of the language from the last triennial review cycle, so not much scope change. This does not include a study as described.
7. **Rachel Mellinger (Alameda County Water District):** Under the Implementation Plans to review the ESLs for groundwater cleanup, will ESLs and an approach for PFAS contamination cleanup/investigation specifically be addressed?
    a. **Richard Looker:** I don't believe there is anything specific on PFAS pollution control. This project has gone through several triennial review processes, and PFAS was not so much on the radar when this project description was originally drafted. There are pressing ground water issues that would be part of the ESL project.
    b. **Kevin Lunde:** If you want to include PFAS on the list, please add that to your comments.
    c. **Andria Ventura:** PFAS is also a surface water issue that we are greatly concerned with.

Public Comments

Andria Ventura:

The beneficial uses and environmental justice are something I've been working on since 2002 in the Bay. I am very pleased to see this project put back into the triennial review. We were warned that this might not make much progress since the last Triennial Review. We were ready to provide the guidance to the Board as to whom they might reach out to. We support the efforts for tribal subsistence fishing use as well as non-tribal subsistence fishing use. We want to see all three beneficial uses on the list and prioritized. It's time to get this project done. We need documentation to clarify to support these beneficial uses. We can get the information you need by gaining community groups and tribes' trust. We are not making full decisions about the Bay without understanding the impacts on those most impacted.

Alexander Tavizon (California Indian Environmental Alliance – CIEA):

CIEA has been working on TMDLs, basin plan amendments, and tribal beneficial uses by providing information to tribes on how to continue to eat traditional fish and avoid those highest in toxins. We helped write two beneficial uses for the tribes. The State Water Board has incorporated them. CIEA is concerned that tribes aren't well informed from the Water Board. outreach to those tribes directly, and we request that the Water

Boards be transparent with CIEA, so we can share information with the tribes as we have the connection to get faster attention. We have a grant to work with tribes to gather information that the Water Boards need to designate beneficial uses for water bodies. We can offer to help coordinate the effort.

San Gregorio Creek is a tribal creek that has tribal property on the creek. The tribe is working with San Mateo RCD, and the San Gregorio TMDL has not been brought to their attention.

Chris Sommers:

I am planning to submit, on behalf of SCVURPPP, a new candidate project for REC-1 beneficial uses for water bodies. This would be in the beneficial uses section of the Basin Plan. There has been lots of work going over the past 3 years at the state and region level on bacteria. In 2019, State Water Board adopted bacteria provisions, added other considerations for beneficial use designations. We'd like to see a project that reviews the 2008 decision to designate REC-1 for all water bodies in the San Francisco Bay region without information about the use. The candidate project would start with data evaluation, identify data gaps, assessment of recreational use of the channels, and this work can be done with local partnerships. The evaluation should include consideration of full body contact, ingestion, high flows, seasonal flows, etc.

The Santa Ana region has done a similar project, and we would like to see a similar process in this region. Include public inputs, come up with the scope, reevaluate and adopt BUs, based on best information to protect public health. Would like to see a pilot version of this in Santa Clara County that could be applied to other parts of the Bay.

Jim Haussener:

- In project 3.1, why do you use the word "should?" Is it required by law? It should be revised.
    - **Richard Looker:** We do not use the word "should" in a sense of compelling someone to do something. We use the word because all the projects on the candidate list are good ideas and should be accomplished. Some projects have been on the candidate list for several cycles. They all "should" be done, but we don't have the resources to do all of them.
    - **Xavier Fernandez (Water Board):** Staff recommends to the Board what we should do, the Board determines what we shall do.
- Project 3.2, 304(a): agree what you said, but it's not in the writing. California Toxics Rule 64 pollutants more stringent, but 19 are not. Why should the CTR criteria do not apply to all pollutants in the region? We always pick the highest requirements, does not make sense.
    - **Richard Looker:** There is a requirement that we must consider federal 304(a) criteria in our Triennial Review. They (304(a) criteria) are recommended criteria but not enforceable. The 304(a) criteria do not become enforceable until they are adopted into state or regional plans or

policies. It's a big job to review those criteria, so we need to decide if doing so is a priority for us. For example, we need to determine if we are dealing with a particular water quality problem involving one of these pollutants that justify the resources to include the criterion for that pollutant into our Basin Plan.

- Project 3.3 "some" waterbodies: Please identify which water bodies.
- Turbidity objective: need to provide clarity. What are you looking at?
    - **Richard Looker:** The current turbidity objective language in the Basin Plan is unclear to Water Board staff and the regulated community as to what to do when natural turbidity is 50 NTU or less. This project is to eliminate that ambiguity in the objective language.
- Dredge and Fill Policy Update: would like clarity on which procedures you will be incorporating. Will that limit the ability to place sediment/dredged material in mudflats?
    - **Xavier Fernandez:** We are working on a Basin Plan amendment to address climate change and using dredged material for fill in wetlands. The April 2021 procedures from State Board are not recommendations; they are requirements for us to follow. We do not want to impede use of sediment in a way that won't have unintended consequences.
- Words matter. Over the next three years, maybe next 6 to 9 years, prioritize the projects.
    - **Richard:** Some of the questions were asking about details of how the candidate projects will be accomplished. At this point we have developed general project descriptions, but the scopes are not fully developed, so it's difficult to include details on how any one project is going to be accomplished in detail. The purpose of the Triennial Review is to get input on "Is this kernel of an idea a good one? And does it make sense to work on it more?"

Chris Malan (Institute for Conservation, Advocacy, Research and Education – ICARE Napa):
The Board was interested in flow projects in 2018. Ms. Malan is specifically interested in the Napa River. She notes that we are in a severe drought. The Water Boards need to get far more involved with the Russian River. A recent study required chasing water for water sampling. Streams and rivers are dying from lack of flows due to illegal pumping. There is lots of room for improvements. She asks the Board to take serious consideration to put in priority for Napa River flow projects.

Carol Mahoney (Alameda County): Sediment reuse options to improve basin margin/sea level rise outcomes should include upland/flood channel sediment and not just dredged materials. The quality of this sediment should also be considered since naturally occurring contaminants

(i.e., mercury) may preclude use of bay sediment that might be beneficial to assist with beach/marsh creation. This is related to the climate change project.

- **Xavier Fernandez:** suggests that we add this to the riparian project or as part of the climate change project

STAFF REPORT

APPENDIX B: RANK-ORDERED DESCRIPTIONS OF PROJECTS CONSIDERED IN THE 2021 BASIN PLAN TRIENNIAL REVIEW

Contents

1. Climate Change and Wetland Policy Update

Water Board staff have invested nearly six years on efforts related to this project and have identified a need for multiple project phases.

The first phase was an analysis of how existing policies regulating wetland fill, wetlands conservation, and ecosystem restoration can best incorporate consideration of sea level rise. This work was published in a Project Report in April 2019.

The second phase is a Basin Plan amendment expected in the spring of 2022 that 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) updating language in Chapter 4 to clarify our planning and permitting processes for climate adaptation projects in coastal waters, including projects that result in fill in wetlands.

The scope of the problem makes this project technically complex and challenging, but there is a growing body of information that can inform our policies at the regional level. Future phases or components of this project could explore changes to 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 compensatory mitigation and monitoring requirements for 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 coordinating with the South Bay Salt Pond Restoration Project to facilitate beneficial use of soil for tidal marsh restoration. 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 compensatory mitigation and monitoring requirements for grey infrastructure (e.g., human-engineered water resources infrastructure such as treatment facilities, dams, seawalls, and pipes) where sea level rise and other climate change impacts affect the mitigation. In places where green infrastructure is not feasible, grey infrastructure may be necessary to protect transportation, energy-generation and wastewater treatment facilities, and other buildings from sea level rise. Clarifying the Water Boards' approach for permitting grey infrastructure 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 first Basin Plan amendment

described above. For instance, there may be a need to clarify mitigation and monitoring requirements for conversion of one wetland type to another wetland type.

Water Board staff have launched a Climate Action Team to assess science-based and stakeholder-driven climate actions needed to address impacts to beneficial uses from other climate change effects, such as groundwater rise, flooding, fire and drought. The Team will recommend actions and strategies that may include amending the Basin Plan to clarify or add authorities and implementation needed to protect beneficial uses.

RANKING DETAILS

CATEGORY: Update Plans and Policies and Update Implementation Plan
PROPOSED BY: Water Board
SUPPORTED BY: Water Board, ACWD, City of Palo Alto, BACWA
SCORE: 72
COMPLEXITY: High
IMPLEMENTING DIVISION: Planning, Watershed
ESTIMATED PERSONNEL-YEARS (PY): 2.0
PY RUNNING TOTAL: 2.0

2. Nutrient Management Strategy and Dissolved Oxygen Assessment Framework in San Francisco Bay

This candidate project would involve staff participation in the Nutrient Management Strategy (NMS) for San Francisco Bay and possible preparation of documentation to memorialize key outcomes of the NMS. Water Board staff has been working with stakeholders and scientists including the San Francisco Estuary Institute (SFEI) to support regulatory management decisions through an improved understanding of the role nutrients play in water quality in the San Francisco Bay Estuary. The NMS Science Plan includes: a monitoring program to gather the observations necessary to support modeling of the Bay ecosystem's response to nutrients; a framework to assess the Bay's condition with respect to nutrients; and development of nutrient management strategies, particularly for NPDES municipal wastewater facilities. These strategies may include a variety of treatment facility upgrades as well as nature-based treatment solutions like horizontal levees which overlap with climate change adaptation and resilience goals. A substantial portion of resources allocated to this project support Water Board staff participation in a variety of NMS committees and workgroups overseeing work to acquire the scientific information needed to evaluate nutrient loading and potential impacts of eutrophication to San Francisco Bay. Additionally, the candidate project will involve collaborating with an NMS working group to develop a eutrophication assessment framework for sloughs in South San Francisco Bay. The working group will focus on establishing dissolved oxygen thresholds that protect

aquatic life by adapting the Virginian Province Approach, which was successfully used by the Water Board in Suisun Marsh. These dissolved oxygen evaluation guidelines and assessment framework could subsequently be used for permitting decisions and the Integrated Report. 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 Water Quality Objectives
PROPOSED BY: Water Board
SUPPORTED BY: San Francisco Baykeeper, The Bay Institute, City of Palo Alto, ACWD, BACWA
SCORE: 64
COMPLEXITY: High
IMPLEMENTING DIVISION: NPDES, Watershed, Planning
ESTIMATED PERSONNEL-YEARS (PY): 1.0
PY RUNNING TOTAL: 3.0

3. Regional Stream Protection Policy

The candidate project is a Basin Plan amendment that would emphasize the importance of protecting riparian corridors and ephemeral streams in the region. The project would consist of two components. First, we would add information to Chapter 1 that presents current scientific understanding about how riparian corridors and ephemeral streams play an important role in maintaining healthy aquatic ecosystems, particularly in the face of a changing climate. Conservation of resilient riparian areas is an essential element of our climate change priorities. Riparian areas provide important dispersal habitat for species undergoing climate-induced range shifts because they span the climatic gradients 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. Climate change creates additional challenges for the protection of ephemeral creeks, as these ecosystems will be more susceptible to changes in precipitation and temperature, and the combined effect leading to increased evapotranspiration rates. The narrative material in Chapter 1 can also highlight the importance of connectivity between tidal portions of creeks and baylands for ensuring an adequate sediment supply to baylands. Baylands are the lands and shallow waters along San Francisco Bay that are or formerly were between the minimum and maximum boundaries of the Bay's tides including tidal marshes and mudflats. Creeks are a critical source of the sediment needed for wetland accretion to keep pace with sea level rise. Second, we would add language in Chapter 4 that includes clear definitions and delineation procedures for riparian corridors and ephemeral streams along with policy measures to promote resilience of these ecosystems to changes in precipitation and temperature. To accomplish this, we would review existing policies to evaluate the need for clarification or updates and assess the need for new policies to enhance ecological

functions and values and promote sediment management practices that maintain beneficial uses. Initial efforts for this project will likely start where local creeks meet baylands and focus on policies that promote creek to bayland connectivity. Future project work will turn to identification of additional implementation measures to ensure stream and riparian area protection up to the headwaters of watersheds.

This project is an important part of the Water Board's response to climate change by: (1) promoting connectivity between watersheds and baylands, (2) addressing projected impacts to beneficial uses from the effects of flooding and sea level rise at confluences of streams and/or flood control channels with the Bay or Pacific Ocean and (3) addressing projected impacts to beneficial uses from the effects of fire and drought. 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): 0.5
PY RUNNING TOTAL: 3.5

4. Temperature Limits to Protect Salmonids

This candidate project would involve reviewing the latest scientific information applicable to Bay Area streams to set appropriate temperature thresholds and an acceptable range of water temperatures to protect salmonids at various life stages. The material reviewed would include available information on the multiple stressors to steelhead in Bay Area creeks and whether local steelhead populations are adapted to local conditions. The first step of this project is to collaborate with Valley Water and a technical panel of scientific experts, and agencies such as National Oceanic and Atmospheric Administration (NOAA), U. S. EPA, and California Department of Fish and Wildlife (CDFW). This group will identify available scientific information and data gaps within topics such as steelhead ecology, food web dynamics, food supply, respiration rates, and growth rates under thermal stress. These interactions will incorporate regional stakeholder input from local agencies and environmental organizations. A subsequent stage of the project would be to consider amending Chapter 3 (Water Quality Objectives) of the Basin Plan to incorporate the protective temperature thresholds along with explanatory guidance as to their applicability for Water Board permits. 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 Water Quality Objectives
PROPOSED BY: U.S. EPA
SUPPORTED BY: Water Board, The Bay Institute, ACWD
SCORE: 50
COMPLEXITY: High
IMPLEMENTING DIVISION: Planning
ESTIMATED PERSONNEL-YEARS (PY): 0.5
PY RUNNING TOTAL: 4.0

5. 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). Resolution No. 2017-0027 established these three uses in the Statewide Plan for Inland Surface Waters, Enclosed Bays and Estuaries of California, but it 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 phase of the candidate project would prioritize relationship-building and collaboration with tribes and subsistence fishing communities including individual meetings with 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. These 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. Water Board staff would work with local tribes as well as groups representing subsistence fishing communities 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 goal of this candidate project is to ultimately amend the Basin Plan to designate these three uses for waterbodies in the San Francisco Bay Region. After collaborating with tribes and subsistence fishing communities to collect the relevant data, Water Board staff would determine the appropriate geographic scope (e.g., specific waterbodies or regional designation) of the use designations for the Basin Plan amendment. The final designation of waterbodies is likely to take more than 3 years which aligns with our other complex Basin Planning projects.

RANKING DETAILS

CATEGORY: Update Beneficial Uses

PROPOSED BY: Clean Water Action, State Water Board

SUPPORTED BY: San Francisco Baykeeper, The Bay Institute, Clean Water Action, California Indian Environmental Alliance, and Bayview Hunters Point Community Advocates

SCORE: 49

COMPLEXITY: Medium

IMPLEMENTING DIVISION: Planning

ESTIMATED PERSONNEL-YEARS (PY): 1.0

PY RUNNING TOTAL: 5.0

6. Dredge and Fill Policy Update

This candidate project would involve incorporating the “State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State” (Procedures) adopted by the State Water Board into Existing Basin Plan requirements for the placement of fill into waters of the State. Existing Basin Plan requirements apply in some circumstances where the new statewide policy does not (e.g., agricultural roads and stock ponds). Therefore, incorporation of the new Procedures will involve careful clarification of the applicable requirements for various fill activities.

RANKING DETAILS

CATEGORY: Update Implementation Plans

PROPOSED BY: Water Board; State Water Board

SUPPORTED BY: Water Board

SCORE: 49

COMPLEXITY: Medium

IMPLEMENTING DIVISION: Planning, Watershed

ESTIMATED PERSONNEL-YEARS (PY): 1.0

PY RUNNING TOTAL: 6.0

7. Develop Flow Criteria for Selected Bay Area Streams and Rivers

The Basin Plan does not currently include narrative or numeric objectives for in-stream flow. There are some water bodies (e.g., creeks, streams, rivers) in the Region where anthropogenically-reduced flows may be harming beneficial uses related to aquatic life during at least a portion of the year.

For this project, flow criteria or objectives would be tributary- or watershed-specific. Water Board staff would determine which water bodies in the Region have beneficial uses at risk from reduced flows, collate available instream flow data, and investigate various modeling and monitoring approaches to ultimately identify high priority water bodies. Flow criteria developed elsewhere relied on multiple years of stream gage data, which are not available for most tributaries in the San Francisco Bay Area. Thus, our approach may require modeling the hydrograph for many catchments. We would seek to leverage limited available resources to conduct needed studies over large geographic areas while addressing multiple species, life stages, and fluvial processes. The State Water Board is preparing a manual with procedures to guide the development of regional flow criteria. This guidance is intended to be applicable statewide, but allows for regional application, and incorporates existing information, studies, and data.

Flow criteria could address minimum low flows during particular time periods (e.g., summer), but can also incorporate ecological benefits of a complete flow regime, which includes the magnitude, variability, duration, and timing of flows.

This project is highly complex and would require close coordination with the California Department of Fish and Wildlife as well as State Water Board's Division of Water Rights because of the nexus with water rights laws.

RANKING DETAILS

CATEGORY: Update Water Quality Objectives
PROPOSED BY: Living Rivers Council
SUPPORTED BY: Living Rivers Council, San Francisco Baykeeper, The Bay Institute
SCORE: 47
COMPLEXITY: High
IMPLEMENTING DIVISION: Planning
ESTIMATED PERSONNEL-YEARS (PY): 1.0
PY RUNNING TOTAL: 7.0

8. Review and Update of Policy 94-086 - Using Wastewater to Create, Restore, and Enhance Wetlands

The receiving waters downstream of many Bay Area wastewater treatment plants include recently restored wetlands or areas that will be restored to wetland habitat in

coming years. In many circumstances, using treated wastewater as a source of freshwater for restored wetlands could provide an environmental benefit by increasing and accelerating the amount of freshwater and brackish wetlands available to birds and wildlife dependent on such habitats. Using treated wastewater in this fashion as a source of freshwater was identified as an important climate change response strategy in the Baylands Ecosystem Habitat Goals 2015 Science Update to "restore estuary-watershed connections that nourish the Baylands with sediment and freshwater" (see also the project on Climate Change and Water Resources Policy). This is an ongoing project that Water Board staff are actively working on.

This project includes review and consideration of the need to update Regional Board Resolution No. 94-086 "Policy on the Use of Wastewater to Create, Restore, and/or Enhance Wetlands." This current policy is now over 20 years old. Over the intervening years, much has been learned about the ecological benefits of freshwater inputs to tidal wetlands and design considerations for restoring tidal wetlands that are resilient to climate change impacts. Further, the hydrology and topography of San Francisco Bay has been changing as vast areas of former salt evaporating ponds are being restored to marsh under the South Bay Salt Pond Restoration Project.

The project would also clarify permitting requirements for wastewater discharges into wetlands and creation of wetlands such as horizontal or ecotone levees that include use of wastewater and develop near-shore permitting strategies for discharges to wetlands. This project would also evaluate and provide guidance about what level of treatment is appropriate for effluent discharged into wetland habitats, including consideration of contaminants of emerging concern (e.g., flame retardants, personal care products, microbeads and nano particles).

Establishing NPDES permits for discharging wastewater in wetlands is complicated by a variety of regulatory issues; this project would explore those regulatory issues and identify policy options. This project would also potentially evaluate issues associated with discharge prohibition exemptions in the Basin Plan and could address Beneficial Use designation associated with the creation of new wetlands.

RANKING DETAILS

CATEGORY: Update Plans and Policies and Update Implementation Plans
PROPOSED BY: Water Board
SUPPORTED BY: Water Board
SCORE: 47
COMPLEXITY: High
IMPLEMENTING DIVISION: Planning, NPDES
ESTIMATED PERSONNEL-YEARS (PY): 1.5
PY RUNNING TOTAL: 8.5

9. Environmental Screening Levels (ESLs) for Groundwater Cleanups

Water Board staff would update the Basin Plan with a description of the tiered decision process used to determine relevant exposure pathways and appropriate site cleanup levels using environmental screening levels (ESLs). 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, long-term (chronic) threat to human health and the environment. The decision process expands the existing protection of groundwater beneficial uses to include potential risk to human health from indoor air exposure and protection of aquatic receptors.

Accomplishing this project would both promote consistency and optimal resource allocation in groundwater cleanup projects, because ESLs are a powerful tool to focus regulatory attention on the most significant contaminant concerns during site assessment and cleanup. This update would not incorporate the current ESL criteria as fixed numbers but rather memorialize the approach for deriving and applying ESLs to cleanup sites. This project would document our current process for screening sites using a multiple pathway conceptual model, which includes groundwater and surface water interactions.

RANKING DETAILS

CATEGORY: Update Implementation Plans
PROPOSED BY: Water Board
SUPPORTED BY: Water Board, ACWD
SCORE: 40
COMPLEXITY: Low
IMPLEMENTING DIVISION: Toxics, Groundwater Protection
ESTIMATED PERSONNEL-YEARS (PY): 0.5
PY RUNNING TOTAL: 9.0

10. Update Cyanide Dilution Credits

The project would be to update Table 4-6 to add cyanide dilution credits for shallow water dischargers and discharge locations not already in the table. Some dischargers (e.g., Fairfield-Suisun and City of Palo Alto) discharge to waters not listed in the table. Therefore, with each permit reissuance, the Water Board must consider appropriate mixing zones and dilution credits for the discharges not listed in Table 4-6. Often, the same effluent is discharged to two or more receiving waters. In these cases, compliance with the effluent limitations is typically measured at just one location; however, different effluent limits may apply. Cyanide effluent limitations may differ for no reason other than that the mixing zones (or lack thereof) result in different dilution credits. As a result, the effective effluent limitations may be more stringent than the Water Board intended when

it adopted Table 4-6. This project would ensure consistency and reduce the effort needed to resolve these challenges during permit preparation. This relatively straightforward project could be combined with the project to add to the Basin Plan unnamed waterbodies receiving NPDES discharges.

RANKING DETAILS

CATEGORY: Update Implementation Plans
PROPOSED BY: Water Board
SUPPORTED BY: Water Board, City of Palo Alto, BACWA
SCORE: 35
COMPLEXITY: Low
IMPLEMENTING DIVISION: Planning, NPDES
ESTIMATED PERSONNEL-YEARS (PY): 0.4
PY RUNNING TOTAL: 9.4

11. 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-4Chlorophenol, 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 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 de-promulgate 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): 2.0
PY RUNNING TOTAL: 11.4

12. Modify Groundwater Sub-Basin Boundaries

This candidate project would involve revising the boundaries of two groundwater basins located in San Francisco and San Mateo counties to be consistent with the California Department of Water Resources Bulletin 118. DWR's Bulletin 118 defines the Westside Basin and the Islais Valley Basin each as one entire groundwater basin with no delineated sub-basins. This update can also provide an opportunity to make a small adjustment to the boundaries of the Niles Cone sub-basin in the Fremont area. The Basin Plan, Figure 2-10C and Table 2-2, may not conform to Bulletin 118 and should be reviewed and updated as necessary.

The Bulletin 118 boundaries are used as the basis for statewide water resource, planning, management, and funding decisions, as well as the California Statewide Groundwater Elevation Monitoring Program. DWR's draft Basin Boundary Regulations, published on July 17, 2015, state that, "revision of any basin boundaries or creation of new sub-basins approved by the Department shall be consistent with the State's interest in the sustainable management of groundwater as expressed in the Sustainable Groundwater Management Act (SGMA)." While elements of the Basin Plan are not required to be consistent with SGMA, maintaining consistency in statewide groundwater management will make planning efforts more effective and efficient.

RANKING DETAILS

CATEGORY: Update Beneficial Uses
PROPOSED BY: San Francisco Public Utilities Commission
SUPPORTED BY: ACWD
SCORE: 26
COMPLEXITY: Low
IMPLEMENTING DIVISION: Planning, Groundwater Protection, Toxics
ESTIMATED PERSONNEL-YEARS (PY): 0.5
PY RUNNING TOTAL: 11.9

13. 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. Because improving this language would require only minor clarifying changes, this project could be accomplished as part of another Basin Planning project.

The project would also revise the objective to state also that waste discharges should not increase normal background light penetration or turbidity above 55 NTU in areas where natural turbidity is 50 NTU or less. Such revision would codify the conventional interpretation of this objective.

RANKING DETAILS

CATEGORY: Update Water Quality Objective
PROPOSED BY: Water Board
SUPPORTED BY: Water Board, ACWD, BACWA
SCORE: 25
COMPLEXITY: Medium
IMPLEMENTING DIVISION: Planning, NPDES
ESTIMATED PERSONNEL-YEARS (PY): 0.5
PY RUNNING TOTAL: 12.4

14. Review Un-ionized Ammonia Water Quality Objective for San Francisco Bay and Freshwaters

This candidate project would be to review and revise, as necessary, the un-ionized ammonia water quality objective for San Francisco Bay Region waterbodies and its associated implementation provisions. Specifically, the purpose of the project is to ensure 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.

RANKING DETAILS

CATEGORY: Update Water Quality Objectives
PROPOSED BY: U.S. EPA
SUPPORTED BY: U.S. EPA
SCORE: 21
COMPLEXITY: Medium
IMPLEMENTING DIVISION: Planning, NPDES
ESTIMATED PERSONNEL-YEARS (PY): 1.0
PY RUNNING TOTAL: 13.4

15. 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.”

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.”

RANKING DETAILS

CATEGORY: Update Water Quality Objectives
PROPOSED BY: Water Board
SUPPORTED BY: Water Board, ACWD, BACWA
SCORE: 20
COMPLEXITY: Medium
IMPLEMENTING DIVISION: Planning, NPDES
ESTIMATED PERSONNEL-YEARS (PY): 0.5
PY RUNNING TOTAL: 13.9

16. 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 attainable[1]. 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 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)

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

SUPPORTED BY: Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP)
SCORE: 18
COMPLEXITY: High
IMPLEMENTING DIVISION: Planning
ESTIMATED PERSONNEL-YEARS (PY): 1.5
PY RUNNING TOTAL: 15.4

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 Planning project. In addition to non-regulatory components from other candidate projects, 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.
- Document the approved Salt and Nutrient Management Plans (SNMPs) for Sonoma Valley, Livermore-Amador Valley, and Santa Clara Valley. There may also soon be specific management actions developed to protect groundwater basins, such as in the nitrate areas of concern of the Livermore and Coyote valleys.
- 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.

- 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.
- 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.
- 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 three nautical miles. 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.