

**STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

STAFF REPORT FOR REGULAR MEETING OF NOVEMBER 13-14, 2014

Prepared October 20, 2014

ITEM NUMBER: 12

**SUBJECT: CONSIDERATION OF A RESOLUTION APPROVING THE 2014
TRIENNIAL REVIEW OF THE WATER QUALITY CONTROL PLAN FOR
THE CENTRAL COASTAL BASIN**

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SUMMARY

Staff prepared a "Triennial Review" of the Water Quality Control Plan for the Central Coastal Basin (Basin Plan). The purpose of the Triennial Review is to identify and prioritize important water quality and watershed protection issues that staff may later develop into Basin Plan amendments.

The Triennial Review is required by state and federal law. Section 303(c) of the federal Clean Water Act requires water quality standards be reviewed and revised, if appropriate, on a triennial basis. Section 13240 of the California Water Code requires basin plans to be periodically reviewed and allows for their revision. Additionally, the Triennial Review process affirms the general adequacy of the Basin Plan in areas not recommended for revision.

Staff initiated the review by distributing a *Notice of Opportunity for Public Comment* and a *Brief Issue Descriptions* document at the beginning of the 45-day public comment period from July 30, 2014 to September 15, 2014. Staff held a public workshop on August 25, 2014, which was attended by four members of the public. We received 11 comment letters.

After consideration of public comments from interested persons, staff developed the *Triennial Review Report* (Attachment 2). The report includes a detailed description of each issue, a summary of public comments and staff responses, and a priority evaluation score for each issue. Staff evaluated the issues by assigning a numeric score based on the following ranking criteria: vision alignment, water quality standards improvement, effectiveness, and public interest. The report concludes with a list of priority issues that will be evaluated as potential Basin Plan amendments. The report also includes an estimate of the projects that staff can evaluate to amend the Basin Plan during the next three years (prior to the next Triennial Review) based on the staff resources available (two personnel years).

The end-product of the Triennial Review is a prioritized list of water quality and watershed protection issues that can be addressed by amending the Basin Plan. This prioritized list is included in the Triennial Review Report (Attachment 2). Staff recommends approval of the prioritized list as presented in the Triennial Review Report, by Resolution No. R3-2014-0054 (Attachment 1).

Upon approval of the prioritized list, Central Coast Water Board staff will evaluate the issues and may develop proposed Basin Plan amendments for consideration by the Central Coast

Water Board. Only the Central Coast Water Board can approve proposed amendments to the Basin Plan. Staff would develop proposed amendments in a public process with input from all interested stakeholders.

COMMENTS

We received comment letters from the following: Dr. Edo McGowan (three letters), Dr. John Ackerman, Willy Cuhna, City of Santa Cruz, City of Lompoc, Greenspace Cambria Land Trust, City of Santa Maria, and the Grower Shipper Association of Santa Barbara and San Luis Obispo Counties. Comments are summarized and responded to as associated with each issue description in the Triennial Review Report (Attachment 2). Entire comment letters are available at the following website:

http://www.waterboards.ca.gov/centralcoast/publications_forms/publications/basin_plan/triennial_review/docs/tri_rev_comment_letters_2014.pdf

RECOMMENDATION

Adopt draft Resolution No. R3-2014-0054 (Attachment 1) completing the 2014 Triennial Review process. Adoption of the resolution concludes the Triennial Review, approves a priority list of issues to be evaluated as future Basin Plan amendments, and affirms the general adequacy of the Basin Plan in areas not under revision.

ATTACHMENTS

1. Draft Resolution No. R3-2014-0054 with 2014 Triennial Review Priority List
2. Triennial Review Report, November 2014

**STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
895 Aerovista Place, Suite 101
San Luis Obispo, California 93401**

DRAFT RESOLUTION NO. R3-2014-0054

**APPROVING THE 2014 TRIENNIAL REVIEW OF THE WATER QUALITY CONTROL PLAN
FOR THE CENTRAL COASTAL BASIN**

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

1. The Water Quality Control Plan for the Central Coastal Basin (Basin Plan) was adopted on March 14, 1975 and has been amended since that date.
2. The Basin Plan establishes beneficial uses to be protected, water quality objectives, and a program of implementation needed for achieving water quality objectives for the waters within the Central Coast Region.
3. Section 303(c) of the federal Clean Water Act requires that water quality standards be reviewed and revised, if appropriate, on a triennial basis, and Section 13240 of the California Water Code requires basin plans to be periodically reviewed and allows for their revision.
4. The Central Coast Water Board and its staff implemented the 2014 Triennial Review of the Basin Plan by performing the following:
 - a. Reviewing the Basin Plan, the past Triennial Review (2009) priority list, and soliciting issues from Central Coast Water Board staff to develop a preliminary list of Basin Planning issues;
 - b. Sending letters to the Region's Basin Plan electronic mailing list for Triennial Review, with a list of preliminary Basin Planning issues for public comment;
 - c. Making the preliminary list of Basin Planning issues, and a staff report explaining the issues and the Triennial Review Process, available to the public on the Central Coast Water Board's internet web page from July 30, 2014 until September 15, 2014;
 - d. Noticing and conducting a public workshop meeting on August 25, 2014 in San Luis Obispo;
 - e. Responding to public comments that were received during the designated period; and
 - f. Revising and prioritizing the list of Basin Planning issues based on the public comments and evaluation of the issues by assigning a numeric score based on the following ranking criteria: vision alignment, water quality standards improvement, effectiveness, and public interest.

5. As a result of the triennial review process, Central Coast Water Board staff identified the priority issues list shown in Attachment 1a.

NOW, THEREFORE, BE IT RESOLVED THAT:

The Central Coast Water Board, in fulfillment of the requirements of Section 303(c) of the federal Clean Water Act and Section 13240 of the California Water Code, has done the following:

1. Concluded the 2014 triennial review of the Basin Plan;
2. Approved the 2014 Priority List of Issues to be Evaluated as Basin Plan Amendments (Attachment 1a) with acknowledgement that this list does not preclude other Basin Plan revisions which may become necessary before the next scheduled triennial review; and
3. Affirmed that those portions of the Basin Plan which were not revised as a part of this update process are adequate at this time.

I, Kenneth A. Harris, Jr., Executive Officer of the California Regional Water Quality Control Board, Central Coast Region, do hereby certify that the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, Central Coast Region, on November 13, 2014.

Executive Officer

Attachment 1a: 2014 Priority List of Issues to be Evaluated as Basin Plan Amendments

ATTACHMENT 1a

2014 Priority List of Issues to be Evaluated as Basin Plan Amendments

Priority	Score	Issue	Description	Est. Resource Needs (PY)
1	17	Watershed and Integrated Water Resource Protection	Amend the Basin Plan to develop authority to address the highest priority activities and factors that affect waters. Amendments will focus on achieving preservation and restoration of watershed processes through implementation of integrated water resource management planning. These amendments and follow-up actions may include prohibitions, beneficial use definitions, water quality objectives, implementation, policies, permit terms, guidelines, and incentives.	1.5
2	16	Designation of Beneficial Uses	Evaluate adequacy of existing Basin Plan beneficial use designations for specific surface waterbodies and for waterbodies not named in Tables 2-1 or 2-2. Clarify the designation of groundwater beneficial uses. Establish a tributary rule.	1.0
3	15	Revision of Water Quality Objectives for Specific Waterbodies	In coordination with groundwater management and other water resources agencies, revise water quality objectives (for chloride, sulfate, boron, sodium, nitrate, and total dissolved solids) in surface waters (Table 3-7) and groundwaters (Table 3-8) based on historical data using statistically-defensible methods. Link these objectives to specific beneficial uses, such as municipal and domestic supply (MUN).	1.0
4	15	Ocean Protection	Amend the Basin Plan to develop the authority to adequately address all relevant factors and activities that contribute to ocean water quality. Strengthen existing water quality standards in the Basin Plan for marine and estuarine waters by developing water quality objectives (for pH, nutrients, carbonate chemistry parameters, total alkalinity, or dissolved inorganic carbon) and by designating additional beneficial uses for sensitive coastal waters.	1.5
5	14	Aquatic Life Protection	Adopt numeric water quality objectives for several Basin Plan narrative water quality objectives, including turbidity and toxicity, which protect aquatic life beneficial uses.	0.6
6	12	Vision Framework	Formally incorporate the Central Coast Water Board's Vision of Healthy Watersheds into the Basin Plan.	0.1
7	11	Waste Discharge Prohibitions	Add enforceable language to the Basin Plan to prohibit the discharge of wastes to land and the discharge of pollutants or dredged or fill materials to state waters.	0.4
8	10	Groundwater Basin Configurations Update	Update groundwater basin configurations in Basin Plan Table 2-3 and Figure 2-2 using the 2003 Department of Water Resources Bulletin No.118 and other sources.	0.1
9	9	Comprehensive Basin Plan Editorial Revisions	Revise and eliminate outdated paragraphs, tables, figures, references to outdated Policies, and appendices in the Basin Plan.	0.5



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**Triennial Review
of the
Water Quality Control Plan for the
Central Coastal Basin
(Basin Plan)**

November 13, 2014

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Introduction

The *Water Quality Control Plan for the Central Coastal Basin* (Basin Plan) was initially adopted by the Central Coast Regional Water Quality Control Board (Central Coast Water Board) in 1975 and has periodically been revised. The Basin Plan explains how the quality of surface and groundwaters in the Central Coastal Basin should be managed to provide the highest water quality reasonably possible. The Basin Plan defines and designates beneficial uses of surface waters and groundwaters (i.e., waters of the state), establishes narrative or numeric water quality objectives to protect beneficial uses, and contains provisions to protect high quality waters from degradation (i.e., antidegradation). The Basin Plan also includes a program of implementation for achieving water quality objectives and outlines corrective measures to be implemented when developing discharge limitations. Figure 1 shows the geographic boundary of the Central Coast Region.

Basin Plans fulfill statutory requirements for water quality planning in the California Water Code (section 13240) and in the federal Clean Water Act (section 303(c)). The Clean Water Act requires a state's water quality standards to be reviewed every three years. The last Triennial Review of the Basin Plan was completed in September 2009.

Consequently, the Central Coast Water Board is conducting the 2014 Triennial Review of the Basin Plan. The Triennial Review will identify priority issues to be addressed through subsequent Basin Plan amendment projects. Basin Plan amendment projects serve to update the Basin Plan, increase its utility, and improve its effectiveness as a tool to protect water quality.

In this document, staff has identified a priority list of Basin Planning issues that may lead to Basin Plan amendments within the next three years.

Figure 1. Central Coast (Region 3) Water Board Boundary



Central Coast Water Board Vision - Healthy Watersheds

The Vision for the Central Coast Water Board is *Healthy Watersheds*. The Vision represents a framework for how we conduct business and achieve measurable results in water quality improvement. The Vision structures our work towards our highest water quality priorities and more strategically aligns us with current and future challenges and opportunities in water quality protection.

Consistent with the Vision, the Central Coast Water Board has established the following measurable goals:

- **Healthy Aquatic Habitat** – By 2025, 80 percent of aquatic habitat is healthy, and the remaining 20 percent exhibits positive trends in key parameters.
- **Proper Land Management** – By 2025, 80 percent of lands within a watershed will be managed to maintain proper watershed functions, and the remaining 20 percent will exhibit positive trends in key watershed parameters.
- **Clean Groundwater** – By 2025, 80 percent of groundwater will be clean, and the remaining 20 percent will exhibit positive trends in key parameters.

For additional information about the Central Coast Water Board's Vision process, please see the following webpage:

http://www.waterboards.ca.gov/centralcoast/publications_forms/publications/vision/index.shtml

In October 2013, the Central Coast Water Board refined a list of priorities to facilitate assignment of staff and other financial resources to specific projects and tasks aligned with the Vision and Measurable Goals. These priorities include the following:

- Preventing and Correcting Threats to Human Health
- Preventing and Correcting Degradation of Aquatic Habitat
- Preventing Degradation of Hydrologic Processes
- Preventing/Reversing Seawater Intrusion
- Preventing Further Degradation of Groundwater Basins from Salts

More recently, drought related activities have become a top priority for the State and Regional Boards. While expedited drought related activities will be a top priority for the foreseeable future, we do not anticipate any Basin Plan amendments being necessary to act on these priorities.

For additional information about the Central Coast Water Board's priorities, please see the following webpage:

http://www.waterboards.ca.gov/centralcoast/board_info/agendas/2013/oct/Item_9/index.shtml

The Central Coast Water Board will prioritize Basin Plan amendment projects in order to achieve our Vision and goals over the long term.

The Basin Plan Amendment Procedures and Process

The Clean Water Act (section 303(c)(1)) requires states to hold public hearings for review of water quality standards at least once every three years. Water quality standards consist of beneficial use designations and water quality criteria (objectives) necessary to protect those

uses. In addition, the California Water Code (section 13240) requires Basin Plans to be periodically reviewed and possibly revised. While a major part of the review process consists of identifying potential problems, an important part of the review is the reaffirmation of those portions of the plan where no potential problems are identified.

The Basin Plan Triennial Review process is complete once the Central Coast Water Board approves a priority list of issues to be considered as Basin Plan Amendments. Then, Central Coast Water Board staff will determine the need for a Basin Plan amendment for each of the priority issues. Additionally, Central Coast Water Board staff may also propose Basin Plan amendments for issues *not* identified during the Basin Plan Triennial Review. For example, amendments will be considered for urgent issues to reflect new legislation. Central Coast Water Board hearings on Basin Plan amendments are advertised to the public throughout the Central Coast Region. Basin Plan amendments become effective when approved by the Central Coast Water Board, the California State Water Resources Control Board (State Water Board), and the California Office of Administrative Law. Surface water standards also require the approval of the United States Environmental Protection Agency (USEPA) to become effective.

The 2014 Triennial Review process included a public workshop, a public comment period, and will include a public hearing. Central Coast Water Board staff solicited input on relevant issues related to review of the Basin Plan from internal and external stakeholders and published a report of these issues for further review and comment by members of the public. These issues and the report were available for review for 45 days. Central Coast Water Board held a public workshop after providing notice of the report's availability for review and the opportunity to attend the public workshop. Following the triennial review public workshop and receipt of other written comments, Central Coast Water Board staff prepared this Staff Report, which includes a ***priority list*** of issues to be evaluated as Basin Plan amendments.

The priority list identifies primary issues that can be completed within existing resource allocations over a three-year period and a secondary list of issues requiring additional resources to complete. Placement of an issue on the priority list will prompt Central Coast Water Board staff to investigate the need for a Basin Plan amendment; it does not necessarily mean that a Basin Plan amendment will subsequently be made.

The Central Coast Water Board will hold a public hearing to discuss and determine the issues and the priority of the issues for Central Coast Water Board staff to evaluate as Basin Plan Amendments.

The 2009 Triennial Review

The previous Triennial Review of the Central Coastal Basin Plan was conducted in 2009. This effort resulted in a list of 13 priority issues for possible Basin Plan amendments. Issue descriptions and progress made to resolve the issues is presented in Table 1. For additional information about the 2009 Triennial Review, please see the following webpage:

http://www.waterboards.ca.gov/centralcoast/publications_forms/publications/basin_plan/triennial_review/index.shtml

Central Coast Water Board staff has made measured progress on several of the 2009 issues (e.g., Vision Framework, Watershed Protection, Comprehensive Basin Plan Editorial Revisions, Groundwater Basin Configurations Update) during the past three years. In addition, State

Water Board staff, working with *ad hoc* Regional Water Board technical advisory committees or State Water Board program roundtables, has made progress on some of the 2009 priority issues (e.g., Biostimulatory Substances Objective Revision, Bacteria Objectives Revision for *E. coli* in Freshwater).

For the 2009 Triennial Review list, staff projected that we would complete the first six projects in the subsequent three years with the available level of resources in the Basin Planning Program (about two personnel years), and based on other Central Coast Water Board program priorities. Although staff completed some data collection and preliminary analyses related to the top six projects, staff did not complete as much work on the top six projects as planned.

There are several reasons for this. First, staff took advantage of emerging opportunities to work on additional projects on the list (e.g., in collaboration with the state-wide, ad-hoc committees working on plans and policy development that were priorities of the State Water Board). Additionally, some Basin Planning resources were redirected to other priority work, including: 1) Responding to the Petitions of the Central Coast Water Board's Agricultural Order, and 2) development of the Central Coast Ambient Monitoring Program Groundwater Assessment Program (specifically collecting and analyzing data, managing grants, and pursuing additional funding for the project). Staff spent about one personnel year, or half of the Basin Planning Program resources, on these other projects. Consequently, staff completed fewer Basin Plan amendment projects than expected from the 2009 Triennial Review Priority List.

Table 1. Issues and Progress from the 2009 Triennial Review

Priority	Issue	Description	Progress
1	Vision Framework	Formally incorporate the Central Coast Water Board's Vision of Healthy Watersheds into the Basin Plan.	Some. Staff drafted Basin Plan amendment language between 2012 and the present.
2	Biostimulatory Substances Objective Revision	Revise the narrative biostimulatory substances objective, replace with numeric objective(s).	Some. State Water Board is developing a statewide nutrient plan/policy with narrative nutrient objectives. The policy will include guidance to translate the narrative objectives into nutrient numeric endpoints.
3	Aquatic Life Protection	Adopt numeric water quality objectives for several Basin Plan narrative water quality objectives, including turbidity and toxicity, which protect aquatic life beneficial uses.	Some. State Water Board is developing a statewide toxicity plan/policy and a Water Quality Control Plan of Implementation for Assessing Biological Integrity in Surface Waters.
4	Watershed Protection	Develop prohibitions on activities that impact watershed processes to improve protection of beneficial uses within the Central Coast Region.	Some. Staff has conducted an assessment of the need for this prohibition. Staff is implementing the post-construction requirements for the Central Coast Region via the NPDES General Municipal Stormwater Permit, which are not prohibitions but explicitly condition new development and redevelopment projects that would otherwise negatively impact watershed processes.

Priority	Issue	Description	Progress
5	Groundwater Recharge Area Protection	Develop prohibitions on activities that impact groundwater recharge areas for the purpose of protecting beneficial uses within the Central Coast Region.	Some. Staff has conducted an assessment of the need for this prohibition.
6	Aquatic Habitat Protection / Riparian Buffer Zone Protections	Amend the Implementation Plan chapter of the Basin Plan to ensure protection of aquatic habitat and riparian areas.	Some. State Water Board is developing a Water Quality Control Plan for wetland area protection and dredged or fill permitting and a Water Quality Control Plan of Implementation for Assessing Biological Integrity in Surface Waters.
7	Revision of Groundwater Objectives	Expand water quality objectives for specific groundwaters to all groundwater basins. Develop a region-wide salt and nutrient policy in accordance with the State Water Resources Control Board recycled water policy adopted in February 2009 (Resolution 2009-0011).	Some. Salt and nutrient management plans are being developed by local agencies.
8	Comprehensive Basin Plan Editorial Revisions	Revise and eliminate outdated paragraphs, tables, figures, references to outdated Policies, and appendices in the Basin Plan.	Some. Staff released a new edition of the Basin Plan on our webpage showing all amendments up to June 2011.
9	Designation of Beneficial Uses	Evaluate adequacy of existing Basin Plan beneficial use designations.	Some. Staff has compiled some historical reference documents to evaluate the rationale for existing beneficial use designations. In addition, new beneficial uses may be proposed as part of the State Water Board's Water Quality Control Plan for wetland protection and dredge and fill permitting.
10	Groundwater Basin Configurations Update	Update groundwater basin configurations in Basin Plan Table 2-3 and Figure 2-2 using the 2003 Department of Water Resources Bulletin No.118 and other sources.	Some. Staff has collected supporting documentation and drafted changes to the map and text in the Basin Plan.
11	Bacteria Objectives Revision for <i>E. coli</i> in Freshwater	Revise existing bacteria objectives to incorporate an <i>E. coli</i> objective for water contact recreation in surface waters.	Some. The State Water Board is developing a statewide control program to protect recreational users from the effects of pathogens in California waterbodies. The program may include: (1) new water quality objectives for both fresh and marine waters based on newly released USEPA criteria, and (2) use of a Reference System approach whereby bacteria densities at monitoring points (e.g., beaches) must be below bacteria densities measured at reference monitoring sites not impacted by human activities.
12	Bacteria Objectives Revision for <i>Enterococcus</i> in Saline Waters	Revise existing bacteria objectives to incorporate an <i>Enterococcus</i> objective for water contact recreation in enclosed bays and estuaries (saline waters).	Some. See progress for Issue 11 above.

Priority	Issue	Description	Progress
13	Tributary Rule	Amend Beneficial Use chapter of the Basin Plan to include a tributary rule that would clarify beneficial uses in tributary streams.	Some. In April 2014, USEPA and the Army Corps of Engineers released a proposed rule (79 FR 22188-22274) which defines the scope of waters protected under the Clean Water Act and defines the term "tributary."

This experience will be informative for prioritizing the new list of projects, based on the current level of resources in the Basin Planning Program (still about two personnel years), and the Central Coast Water Board's continuing need for additional resources for other high priority projects.

Public Participation and 2014 Triennial Review Schedule

Public participation is an important part of the Triennial Review. The process included a public workshop, a public comment period, and will include a public hearing. The purpose of the workshop was to provide information to and solicit comments from interested parties regarding the Basin Plan Triennial Review. In addition, interested parties also had an opportunity to submit written comments during the 45-day comment period.

The schedule for the 2014 Basin Plan Triennial Review was as follows:

Public comment period began	July 30, 2014
Public workshop in San Luis Obispo	August 25, 2014
Public comment period ended	September 15, 2014
Public Hearing & Board meeting	November 13, 2014

The Central Coast Water Board maintains an email subscription list for anyone interested in receiving periodic announcements about the Triennial Review of the Basin Plan. To sign up for these announcements, go to the following webpage and select "Basin Planning Triennial Review":

http://www.waterboards.ca.gov/resources/email_subscriptions/reg3_subscribe.shtml

Summary of Public Comments

A total of 11 comment letters were received during the Triennial Review public comment period (Table 2). Staff has reviewed all public comments received. A summary of comments made by each commenter identified in Table 2 is included in the appropriate issue descriptions that follow. Central Coast Water Board staff responses are included in the specific issue summary.

Table 2. Public Comment Letters Received During the 2014 Triennial Review

No.	Commenting Organization	Representative
L1	General Public	Dr. Edo McGowan
L2	General Public	Dr. John Ackerman
L3	General Public	Willy Cuhna
L4	City of Santa Cruz Water Department	Chris Berry
L5	General Public	Dr. Edo McGowan
L6	General Public	Dr. Edo McGowan
L7	City of Lompoc	Patrick Wiemiller
L8	Greenspace Cambria Land Trust	Mary Webb
L9	City of Santa Maria Utilities Department	Richard G. Sweet
L10	Grower Shipper Association of Santa Barbara and San Luis Obispo Counties	Claire Wineman, Gail Delihant ^[HK1]
L11	Santa Clara Valley Water District	Joan Maher

Issue Ranking Process and Prioritization Criteria

Resolution of Basin Plan Triennial Review issues may require the help of stakeholders, scientific research organizations, other agencies (such as municipal discharge authorities), and USEPA. To give detailed attention to each issue concurrently, however, would far outstrip available personnel resources.

Therefore, Central Coast Water Board staff used a ranking process to prioritize all potential Basin Plan amendment issues according to specific criteria. Each potential Basin Plan issue was assigned a score between 1 (low priority) and 5 (high priority) for each of the criteria listed below. Assignment of these scores was based on staff experience and input received during the public workshop and in comment letters. The ranking criteria are as follows:

- **Vision Alignment** - Does the issue align with the Central Coast Water Board's Vision, Measurable Goals, and priorities (stated above)?
- **Water Quality Standards Improvement** - Will the issue improve water quality standards through new or revised beneficial uses or water quality objectives?
- **Effectiveness** - Will the issue advance water quality protection by improving 1) regulatory and program efficiency, or 2) legal authority to regulate activities that negatively impact water quality and watershed processes?
- **Public Interest** - Does the issue have a high perceived public interest?

Staff prioritized the potential issues by summing each criteria score into a final score ranging from zero (low priority) to 20 (highest priority). The scoring for each issue and for each criterion is shown in Table 3 following the issue descriptions. Staff also considered other factors such as, geographic scope, resources already invested, and availability of additional resources. Staff ranked the potential issues from highest to lowest in relative importance for inclusion in the 2014 Triennial Review Priority List (Table 4).

Format for Issue Descriptions

For each issue presented in the next section, Central Coast Water Board staff prepared a summary of the issue containing the following sections:

Issue:

A general topic name for the issue.

Discussion:

A brief description of the issue, including progress made toward issue resolution, if appropriate.

Type of Action:

A description of the type of regulatory action necessary to address or resolve the issue. Possible types of action are as follows:

- beneficial use amendment (new or revised);
- water quality objective amendment (new or revised);
- implementation amendment (new or revised);
- new or revised policy;
- water quality surveillance and monitoring amendment; or
- editorial corrections or minor clarifications to the Basin Plan.

Public Comment Summary:

A list of each commenter and a summary of the commenter's testimony and comments on the issue.

Staff Response:

Central Coast Water Board staff responses to public comments.

Evaluation Score:

A numeric score, based on the prioritization ranking criteria, ranging from 0 (lowest priority) to 20 (highest priority). See Table 3 for scores for each criterion per each issue and Table 4 for final ranking in priority order for all issues.

Recommendation:

A preliminary recommendation from Central Coast Water Board staff for the action to be performed to address the issue. Possible recommendations are as follows:

- Prioritize this issue during the 2014 Triennial Review;
- Remove this issue from 2014 Triennial Review; or
- Remove this issue from 2014 Triennial Review – State Board actively working on this issue.

Triennial Review Issue Descriptions

Issue 1: Vision Framework

Discussion:

The Basin Plan should be amended to formally incorporate the Central Coast Water Board's Vision of Healthy Watersheds, associated measurable goals, and data assessment and management methodology to support tracking progress toward achieving these measurable goals. Some terms in the vision language may need to be defined, including "proper watershed function," "healthy," and "clean."

This amendment will provide information and transparency to the public because the Basin Plan will include the overarching framework within which the Central Coast Water Board determines how to use the authorities in the Basin Plan so that water quality objectives are met and beneficial uses are supported. This language will also describe how the Central Coast Water Board measures and tracks its effectiveness and achievement of goals, as well as indicate how and where the public can find this information. It will also explain the context in which the Central Coast Water Board prioritizes and selects new projects to work on and decides how to distribute resources to the various priority projects.

Since this was a priority on the 2009 list, staff has drafted language for this amendment. Since it is an editorial correction amendment, staff coordinated development of the language with other editorial corrections. Taken as a group, staff anticipates being able to complete a draft of all these editorial corrections by December 2014 and present to the Board in 2015. See the Comprehensive Basin Plan Editorial Revisions below (Issue 12).

Type of Action:

Implementation/Policy
Water Quality Surveillance and Monitoring

Public Comment Summary:

City of Santa Maria (L9)

In general, the City does not oppose including a linkage between the Basin Plan and the Regional Board's Vision for Healthy Watersheds. The Vision Framework's focus on a watershed approach aligns well with the City's Integrated Plan efforts. However, the linkage between the Basin Plan and the Vision Framework should be made in a way that allows for flexibility; simple incorporation of the Vision Framework may drive determinations that are too rigid and may inhibit creative approaches in the future. A better approach may be to prioritize the Watershed and Integrated Water Resource Protection concept reflected in Issue 2.

Staff Response:

The Vision framework is intended to encourage flexibility in solving water quality problems while at the same time establishing transparent measurable goals. For example, while the Vision framework identifies specific measurable goals, it does not specify the means for achieving those goals.

Evaluation Score:

12 out of 20.

Recommendation:

Prioritize this issue during the 2014 Triennial Review.

Issue 2: Watershed and Integrated Water Resource Protection

Discussion:

The Central Coast Region's watersheds and water resources have been adversely impacted by various land use and land development practices. The current Basin Plan does not comprehensively address the highest priority activities and factors that affect the quality of waters of the State, even though section 13050(i) of the Porter-Cologne Water Quality Control Act specifies that "water quality control" means the regulation of *any activity or factor* which may affect the quality of the waters of the state (*emphasis added*). Furthermore, the Basin Plan does not provide authority and implementation to address the highest priority activities and factors in an integrated fashion and with incentives for multi-benefit activities.

The authority and implementation programs currently provided in the Basin Plan focus primarily on controlling pollutant discharges and support some beneficial uses (e.g., establishing effluent limits in waste discharge requirements that insure receiving waters for the discharge meet municipal and domestic drinking water supply water quality objectives). However, these existing authorities and implementation programs do not focus on other activities and factors even though section 13000 of the Porter-Cologne Water Quality Control Act specifies that "activities and factors which may affect the quality of the waters of the state shall be regulated to attain the highest water quality which is reasonable..."

Many of these other activities and factors have adverse effects on water quality and other beneficial uses that do not have established water quality objectives to indicate an identifiable limit or condition of protection (e.g. wildlife (terrestrial) habitat, freshwater replenishment, groundwater recharge). Activities that affect the quality of waters (e.g., wastewater collection, treatment and reuse; urban runoff pollution control and recapture; stream and wetland restoration; flood management; surface water resource development; and groundwater recharge and use) are generally addressed separately in the Basin Plan and some are minimally addressed. The current authority and implementation programs are inadequate to address activities such as land conversions that reduce infiltration capacity, redirect runoff to receiving water bodies already impaired by pollutants or containing sensitive aquatic species or habitat, and redirect runoff from areas where the water naturally infiltrated to groundwater to areas where the water discharges to a stream or the ocean.

Modifications to Basin Plan prohibitions, objectives, implementation conditions, policies, guidelines, and incentives can address these high priority activities and factors and can create integrated management and promotion of multi-benefit activities. This would lead to improvements in the Central Coast Water Board's protection and restoration of water quality, water supply and watersheds.

The purpose of this amendment is not to regulate all activities and factors that may affect water quality; that approach would not be reasonable or rational. The purpose of this amendment is to acknowledge the Water Board's authority and responsibility to effectively regulate the highest priority activities and factors that will protect and restore beneficial uses over the long-term, and describe the Water Board's implementation of this concept.

For example, municipal, industrial, and agricultural waste discharge permits include conditions that ensure facilities and projects meet water quality objectives, but such permits do not provide conditions that ensure facilities and projects preserve or restore other factors which may affect the quality of waters, such as biological habitat, stream stability, or groundwater infiltration capacity. These factors must be addressed to protect many of the beneficial uses and

specifically to respond to pressure on water supply. This need is increasingly prevalent and likely to expand due to climate change, current drought conditions, and degradation of and competition for reliable water supply for drinking, as well as to support fish and other ecological regimes.

Modifications to the Basin Plan will facilitate improved water management by local water-related agencies, such as those managing urban runoff and flood management in California. These agencies are faced with necessary infrastructure development and redevelopment to address public health and safety issues, climate change adaptation, and meet clean water goals. Water drainage management to date has created unintended consequences of exacerbating flooding, removing community and ecosystem water resources, and preventing recharge of groundwater basins needed for public water supply; these issues are beginning to be addressed through integrated water management in places such as Santa Ana Watershed Project Authority, Santa Clara Valley Water District, Greater Los Angeles County, Sonoma County Water Agency and others.

Therefore, lack of state authority and lack of requirements and incentives for local agencies have led to disjointed water resource management with unintended consequences such as increased flooding, community loss of water resources, and reduced groundwater recharge. Continuing with *status quo* is inefficient and will likely lead to increased adverse consequences and emergency expenditures. Moreover, increasing population, aging infrastructure, and increasingly limited water supply will exacerbate the situation. Integrating management of these activities results in multi-benefit projects and is critical to the long-range water resource planning necessary for meeting future water quality and supply needs. For example, integrated multi-benefit wetland restoration projects can improve aquatic habitat, reduce flooding, and enhance groundwater recharge all at the same time.

To ensure the beneficial uses of waters are fully protected and restored, staff proposes to amend the Basin Plan to develop the authority to adequately address all relevant activities and factors that affect waters. Amendments will likely focus on achieving preservation and restoration of watershed processes through implementation of integrated water resource management planning. This will maximize the efficient use of water through capture, recycling, and infiltration, while increasing beneficial use protection and reducing pollution discharges. Staff will investigate the most critical types and locations of resource issues to address and the most appropriate types of Basin Plan amendments to address them. Basin Plan amendments will be tailored to best address the types and locations of resource issues identified as highest priority. These amendments and follow-up actions may include prohibitions, beneficial use definitions, water quality objectives, implementation, policies, permit terms, guidelines, and incentives.

Type of Action:

Beneficial Uses
Water Quality Objectives
Implementation/Policy

Public Comment Summary:

Willy Cunha (L3)
City of Santa Maria (L9)
Grower Shipper Association (L10)
Santa Clara Valley Water District (L11)

Basin management activities, goals and plans should deal with the whole watershed, not just the basins at the bottom (L3).

Out of all the issues identified in the "Brief Issue Descriptions," Issue 2 best reflects the City of Santa Maria's goals. Rather than focusing on the Regional Board's authority to "address all relevant activities and factors that affect waters," however, the Basin Plan Amendment should support a process in which dischargers develop and propose for Regional Board approval integrated approaches that result in multi-benefits. The Basin Plan Amendment could include incentives that the Regional Board might provide to those dischargers that pursue such an approach. A Basin Plan Amendment that merely addresses the Regional Board's authority to impose such an approach is not supported. It will not result in the type of collaboration and flexibility needed to successfully pursue an integrated approach to water quality that achieves the multi-benefits contemplated. (L9)

Several proposed Basin Plan issues would aggressively and unilaterally expand the role of the [Central Coast] Water Board if ultimately approved. We ask that you remove these priorities such that the role of the Central Coast Water Board can be thoughtfully considered during a thorough vetting process assessing the roles of other local, state, and federal policy and enforcement mechanisms. We urge you to remove Issue 2: Watershed and Integrated Water Resource Protection (page 10) as currently written. (L10)

We have grave concerns with the ambiguous and broad authority suggested by: "...staff proposes to amend the Basin Plan to develop the authority to adequately address all relevant activities and factors that affect waters" (page 11). There are numerous other activities at the local, state, and federal levels that are continually moving towards better water resource management. These include collaborative, local Integrated Regional Water Management Plans (IRWMP) that emphasize implementation activities. (L10)

Other examples of efforts already underway include the transfer of the Drinking Water Program from the California Department of Public Health to the State Water Board and pending groundwater management legislation. As written, Issue 2 could undermine multi-agency collaborative efforts that consider and improve integrated water resources and instead create conflicts that would not result in the mutual goal of improving water quantity and quality where needed. (L10)

The Santa Clara Valley Water District supports an integrated approach to protecting surface water and groundwater quality, but is concerned with the potential scope of related Basin Plan amendments. There are many approaches to this complex issue, ranging from voluntary cooperative efforts to regulatory limits or prohibitions. To be most effective, the approach to improving water quality through integrated water resources management should be developed in coordination with local water resources, groundwater management, and land use planning agencies. (L11)

Staff Response:

A Watershed and Integrated Resource Protection amendment to the Basin Plan will not "aggressively and unilaterally" expand the role of the Central Coast Water Board. The purpose of this amendment is not to regulate all activities and factors that may affect water quality; that approach would not be reasonable or rational. We revised the summary of this concept above to describe that the purpose of the amendment is to better more effectively regulate the highest priority activities and factors that will protect and restore beneficial uses over the long-term.

Amendments to the Basin Plan would serve to formally state the authority already established under the California Water Code. In addition, any such Basin Plan amendment must proceed through the public process already established for amending Basin Plans. This public process will necessarily involve coordination and collaboration with local water resources, groundwater management, and land use planning agencies. Further, options for types of Basin Plan amendments and follow-up actions are broad, and can include incentives and integrated water resource management planning.

Evaluation Score:

17 out of 20.

Recommendation:

Prioritize this issue during the 2014 Triennial Review.

Issue 3: Groundwater Recharge Area Protection

Discussion:

Consistent with the Vision of Healthy Watersheds, the Basin Plan should be amended to prohibit land management activities that impact groundwater recharge within the Central Coast Region. Protecting groundwater recharge invariably also protects groundwater from pollution, enhances water supply, and maintains a critical watershed process that supports beneficial uses. Protecting groundwater from pollution is one of the most effective methods for preventing overall water quality degradation, and is especially important where groundwater is the sole or primary source of drinking water.

A more definitive link is needed between the groundwater recharge beneficial use (GWR) and the protection of recharge areas to protect both water supply and water quality. The Basin Plan should identify where groundwater recharge is critical to maintaining beneficial uses (both groundwater and surface water).

Thus, it is critical that we preserve groundwater quality at the source, by identifying and protecting groundwater recharge areas.

The protections described by this issue are now more fully developed in the Watershed and Integrated Water Resource Protection Issue (above).

Type of Action:

Implementation/Policy

Public Comment Summary:

Willy Cunha (L3)

City of Santa Maria (L9)

Grower Shipper Association (L10)

Santa Clara Valley Water District (L11)

Groundwater monitoring data should be used to help define sustainable levels of groundwater within defined portions of basins. More effort should be lent to delineating what are the constituents of our ground water deep in these basins. Use this information to determine why water quality is declining. If it is due to farmers or cities introducing salts or negative chemicals to the system, those should be curtailed. If it is due to water extractions of cleaner water from higher elevations of the subterranean water resource efforts and resources should be turned in that direction. Don't blindly spend your limited time and budgets on activities less beneficial to the water resource. (L3)

The City supports the idea of continuing to protect groundwater recharge efforts and areas that are well-suited for groundwater recharge. However, the City believes that this concept is best implemented through the Watershed and Integrated Water Resource Protection idea reflected in Issue 2. The City therefore supports the removal of this issue from the 2014 Triennial Review. (L9)

We support Staff's recommendation to remove Issue 3. (L10)

The District supports removing this issue. (L11)

Staff Response:

The Central Coast Water Board currently uses groundwater monitoring data from a variety of sources including irrigation, public supply, and monitoring wells to assess water quality in groundwater. The Central Coast Water Board implements the Groundwater Assessment and Protection program (GAP or CCAMP-GAP, as part of the Central Coast Ambient Monitoring Program), a regionally scaled water quality monitoring and assessment program. The purpose of the program is to provide scientific information to Central Coast Water Board staff, local water agencies and water purveyors, and the public, to protect, restore, and enhance the quality of the waters of central California.

Central Coast Water Board staff is facilitating capture of existing and future data from other agencies and its management via the State Water Board's GAMA GeoTracker database, making the CCAMP-GAP data readily available to the public and other regulatory agencies. We will use the data from CCAMP-GAP to determine groundwater health and trends throughout the basins in the Central Coast region. The data will also help define our highest priorities, identify and support appropriate Central Coast Water Board actions, and measure our performance in achieving our Healthy Watersheds Vision and Measurable Goal of Clean Groundwater.

Staff agrees that the groundwater recharge area protections discussed in this issue are best implemented through the Watershed and Integrated Water Resource Protection idea reflected in Issue 2.

Evaluation Score:

12 out of 20.

Recommendation:

Remove this issue from 2014 Triennial Review.

Issue 4: Revision of Water Quality Objectives for Specific Waterbodies

Discussion:

New opportunities (e.g., updated information about groundwater conditions and/or impacts to beneficial uses) exist to improve our numeric water quality objectives for salts (namely, for chloride, sulfate, boron, sodium, nitrate, and total dissolved solids). These objectives apply to specific receiving waters for both surface water (Table 3-7, Chapter 3, section II.A.4) and groundwater (Table 3-8, Chapter 3, section II.A.5); however, these objectives are not linked to any specific beneficial uses, such as municipal and domestic supply (MUN).

These water quality objectives do not necessarily represent the baseline condition of these particular waters, which makes it difficult to prevent further degradation as required by the Anti-degradation Policy (i.e., maintain the highest water quality that existed since 1968). Ideally, the Basin Plan objectives for specific receiving waters should be based on site-specific, historical data, which does not exist in most cases in the Central Coast Region. Where historical data is lacking, to be protective of water quality, these objectives could be based on data that represents the most recent, statistically-viable baseline. Additionally, these objectives could be improved by associating them with specific beneficial uses at proper thresholds that protect those uses.

The current objectives create obstacles for staff when:

- 1) controlling discharges by establishing meaningful effluent and/or receiving water limits,
- 2) evaluating compliance with the Antidegradation Policy, and
- 3) evaluating water quality trends over time with respect to scientifically-defensible water quality benchmarks.

In addition, Table 3-8 should be expanded to cover all groundwater basins in the Central Coast Region and to also include minimum and maximum objective values.

Type of Action:

Water Quality Objective Amendment
Policy

Public Comment Summary:

Santa Clara Valley Water District (L11)

Central Coast Water Board staff's discussion cites deficiencies in the numeric objectives for salts in surface water (Table 3-7) and groundwater (Table 3-8), but does not provide information on where or how the objectives are deficient. (L11)

The District concurs that numeric objectives should be reviewed and revised as necessary, and recommends this be done in coordination with groundwater management and other water resources agencies. These objectives should be influenced by several factors, including current technical guidelines, available historic data, enforcement feasibility, and beneficial uses. The Basin Plan should clearly document the source and intended use of these objectives. For example, the Basin Plan median groundwater objectives for TDS, chloride, sodium, and nitrogen are below existing median concentrations for the Llagas Subbasin, and it is not clear how these objectives were developed. (L11)

The need for minimum, median, and maximum objectives for groundwater is unclear and there is no discussion of the rationale or potential use of multiple objectives. The District is concerned

about the use of a single objective for surface water; the variability of surface water quality over both time and location suggests that the objective may be better suited to be set as a range (minimum- maximum) or by reach. In any case, the basis for the objectives and their intended use should be clearly described in the Basin Plan. (L11)

Staff Response:

Staff edited the issue description to delete the word “deficiency” in response to the comment (L11) and clarified the limitations using these objectives and the fact that the current objectives are currently based on the lack of historical data to support some of the existing water quality objectives in Tables 3-7 and 3-8. Many of these objectives date to the original 1975 edition of the Basin Plan, when the level of documentation was not as rigorous as today’s requirements. Since that time, additional information exists about health and environmental effects of these constituents and the levels that cause these effects. The overarching goal is to have realistic and protective water quality objectives for these salts, which can be applied to specific sub-areas of the Central Coast Region.

Groundwater quality objectives in the Basin Plan have traditionally been established as median values, meaning that 50% of the monitoring data may exceed the median value which only represents estimated baseline conditions per limited historical data. These objectives should be reevaluated to account for more current data and beneficial use thresholds. The result of such a reevaluation may favor minimum and maximum objectives instead of medians. For example, minimum and maximum levels would represent a range of reasonable conditions for some objectives and beneficial uses. This is because groundwater and waste discharge conditions are dynamic so single-value objectives may not represent protective conditions.

Evaluation Score:

15 out of 20.

Recommendation:

Prioritize this issue during the 2014 Triennial Review.

Issue 5: Groundwater Basin Configurations Update

Discussion:

The Basin Plan should be amended to update groundwater basin configurations in Table 2-3 and Figure 2-2 using new groundwater reference materials including, but not limited to:

- The 2003 Department of Water Resources Bulletin No.118,
- The San Luis Obispo County Paso Robles groundwater basin study, and
- The U.S. Geological Survey Open File Report 00-444 on the Llagas groundwater subbasin in the Gilroy-Hollister groundwater basin.

These may not be the only areas where local water agencies or districts have defined groundwater management areas that differ from DWR Bulletin 118. The emerging programmatic strategies outlined in various recent documents such as the California Water Action Plan and the State Water Board's Strategic Work Plan for groundwater (concept paper) may also influence what the basin "configurations" look like.

A Basin Plan amendment is planned for 2015 to address this issue if it remains a priority in the 2014 Triennial Review. Staff has made progress on this work since the last Triennial Review, and it is included in the Comprehensive Basin Plan Editorial Revisions Issue below (Issue 12).

Type of Action:

Beneficial Use Designations Revision

Public Comment Summary:

Grower Shipper Association (L10)
Santa Clara Valley Water District (L11)

We support Staff's recommendation to remove Issue 5. (L10)

The Basin Plan sets objectives and goals for the management of basins, and cannot be effectively implemented unless the basins are defined. To ensure consistency, the District recommends that the Basin Plan use the groundwater basins and subbasin boundaries and names as defined in the 2003 Department of Water Resources Bulletin 118 and future updates. (L11)

Staff Response:

Staff aims to have accurate groundwater basin descriptions and consistent names for these basins in the Basin Plan. The Basin Plan amendment planned for 2015 will utilize Bulletin 118 and all other known resources to delineate groundwater basins. For this reason, staff recommends keeping this issue in the 2014 Triennial Review priority list.

Evaluation Score:

10 out of 20.

Recommendation:

Prioritize this issue during the 2014 Triennial Review.

Issue 6: Aquatic Life Protection

Discussion:

The Basin Plan should be amended to adopt numeric water quality objectives for several Basin Plan narrative water quality objectives to protect aquatic life beneficial uses.

Basin Plan water quality objectives for turbidity are expressed in Jackson turbidity units (JTU). Jackson turbidity units, however, are no longer commonly used to measure turbidity because Jackson turbidimeters cannot measure turbidity lower than 25 JTU, are cumbersome, and depend on human judgment to determine the extinction point. Nephelometric is now the accepted method to measure turbidity. The Basin Plan should be amended to express the turbidity objective in nephelometric turbidity units (NTU) rather than the existing JTUs.

Additionally, the Basin Plan should be amended to add numeric turbidity objectives to protect COLD and WARM beneficial uses. Turbidity criteria to protect from excessive sedimentation (e.g., 100 NTU) and to ensure that aquatic life can search for food (25 to 40 NTU) are also needed. Numeric turbidity objectives are also needed to protect threatened and endangered anadromous fish in waterbodies designated for spawning (SPWN) and migrating (MIGR). Since turbidity levels naturally fluctuate, such as during storm events, turbidity water quality objectives may be best expressed in ranges, seasonally, and/or with allowable occasions of exceedance, to mimic natural storm conditions.

The Basin Plan needs aquatic life objectives to establish spawning gravel and pool depth sediment criteria; temperature, oxygen, and turbidity duration curves; and flow passage requirements for upstream and downstream migration. The 2013 *South-Central California Coast Steelhead Recovery Plan* written by the National Marine Fisheries Service provides a wealth of information on these parameters, including some water quality requirements and identification of critical habitat areas:

http://www.westcoast.fisheries.noaa.gov/protected_species/salmon_steelhead/recovery_planning_and_implementation/south_central_southern_california_coast/south_central_southern_california_coast_recovery_plan_documents.html.

The Basin Plan needs dissolved oxygen objectives to account for ambient conditions, including daily and seasonal fluctuations. The Basin Plan needs dissolved oxygen objectives for COLD and WARM beneficial uses in percent saturation in addition to the existing objectives expressed in mg/L.

The Basin Plan temperature objectives should be amended to account for ambient conditions, including daily and seasonal fluctuations, including temperature objectives for the protection of COLD and WARM beneficial uses.

The Basin Plan should link water quality objectives for specific waterbodies in Table 3-7 to specific beneficial uses. In addition, the following sentence should be clarified: "Specific water quality objectives for a particular area may not be directly related to the objectives indicated" (Chapter 3, page III-12, section II.A.3, second paragraph).

The Basin Plan needs a numeric nitrate objective to protect aquatic life (e.g., 10 mg/L as NO₃). This objective may be distinctly different from a nitrate objective to prevent biostimulation.

The Basin Plan needs a narrative objective to protect aquatic life from additive toxicity, similar to the narrative objective in the Central Valley Basin Plan.

The Basin Plan needs region-wide and site-specific numeric water quality objectives for pesticides, pH, phosphorous, nickel, chromium, and specific salts. Some watersheds in the Central Coast Region contain naturally high levels of pH, phosphorous, nickel, chromium, sodium, and chloride.

This aquatic life protection amendment would benefit from coordination with the State Water Board's current development of a statewide toxicity plan/policy, nutrient policy, and Water Quality Control Plan for assessing biological integrity.

Type of Action:

Water quality objective (new or revised)

Public Comment Summary:

City of Santa Cruz (L4)

City of Santa Maria (L9)

Santa Clara Valley Water District (L11)

Developing turbidity objectives specifically for fisheries purposes seems well intentioned, but why would one choose any particular beneficial use as warranting a special objective? Why not choose other beneficial uses like MUN for similar focus? (L4)

The City does not support prioritizing the adoption of additional numeric water quality objectives. Narrative objections remain appropriate and conversion of narrative objectives to numeric ones will not facilitate better water quality outcomes. Rather than focusing on adding numeric requirements, the Triennial Review should prioritize an integrated and watershed-based approach to achieving existing objectives. For this reason, the City does not support prioritizing Issue 6. (L9)

The District supports the recommendation to maintain this issue as a priority and change the turbidity units to NTUs. The District recommends that the water quality objectives for protecting aquatic life be defined on a stream by stream basis and be tied to specific aquatic life forms and life stages. Consideration should also be given to specific reaches within the watersheds (i.e., headwaters vs estuary). (L11)

Staff Response:

Turbidity objectives for aquatic life were emphasized in the issue description because high turbidity is a greater threat to the aquatic habitat compared to other uses such as MUN, since MUN generally has systems in place to reduce turbidity while aquatic life does not.

Much scientific work evaluating the adverse effect of pollutants on aquatic life has occurred since the objectives in Chapter 3 were adopted. For this reason, staff recommends continuing to refine the numeric objectives for the protection of aquatic life. In conducting the evaluation necessary to support refining or changing objectives, staff may recommend alternatives to establishing numeric objectives; for example, staff may propose a method for translating narrative objectives into numeric targets for temperature, dissolved oxygen and/or nutrients to address stream reach- or site- specific conditions.

Evaluation Score:

14 out of 20.

Recommendation:

Prioritize this issue during the 2014 Triennial Review.

Issue 7: Aquatic Habitat Protection / Riparian Buffer Zone Protections

Discussion:

Building upon the efforts of statewide and regional riparian and wetland policies and consistent with the Vision of Healthy Watersheds, amendments are needed for present and potential beneficial uses, water quality objectives, and Implementation Plan chapters of the Basin Plan to ensure protection of aquatic habitat and riparian areas.

For example, Chapter 2 could be amended to add several new beneficial use definitions:

Flood Attenuation/Flood Storage (FLD) – beneficial uses of riparian wetlands in flood plain areas and other wetlands that receive natural surface drainage and buffers its passage to receiving waters. Source: Lahontan Basin Plan.

Water Quality Enhancement (WQE) – Uses of waters, including wetlands and other waterbodies, that support natural enhancement or improvement of water quality in or downstream of a waterbody including, but not limited to, erosion control, filtration and purification of naturally occurring water pollutants, streambank stabilization, maintenance of channel integrity, and siltation control.” Source: North Coast Basin Plan.

Wetland Habitat (WET) – Uses of water that support natural and man-made wetland ecosystems, including, but not limited to, preservation or enhancement of unique wetland functions, vegetation, fish, shellfish, invertebrates, insects, and wildlife habitat. Source: North Coast Basin Plan. (The Wetland Habitat (WET) beneficial use definition may be more fully developed in the State Water Board’s statewide policy for wetland area protection. If so, staff will defer to the statewide policy.)

The Basin Plan needs a description of riparian and wetland functions. This could include the concepts of avoiding, minimizing, or mitigating impacts to waters. Minimum wetland/riparian mitigation ratios currently being developed in the Lahontan Regional Board Basin Plan could serve as an example for the Central Coast Region.

The State Water Board is currently developing a statewide Water Quality Control Plan for wetland area protection and dredged or fill permitting.

The protections described by this issue are now more fully developed in the Watershed and Integrated Water Resource Protection Issue (above).

Type of Action:

Beneficial use amendment (new or revised).
Water quality objective amendment (new or revised).
Implementation/Policy.

Public Comment Summary:

City of Santa Cruz (L4)
City of Santa Maria (L9)
Grower Shipper Association (L10)
Santa Clara Valley Water District (L11)

Riparian corridors have continued to be impacted by a litany of impacts. It is not clear how the current progress summary (which wraps riparian protection in with several other issues) will

specifically protect riparian corridors. We strongly advocate for stronger protection of riparian corridors and hope that the Board will exercise whatever authority it has on that matter to achieve such protections. (L4)

The City supports efforts to protect aquatic habitat and riparian buffer zones. The City agrees, however, that such protection is best addressed within the Watershed and Integrated Water Resource Protection concept reflected in Issue 2. The City therefore supports removal of this issue from the 2014 Triennial Review. (L9)

We support Staff's recommendation to remove Issue 7. (L10)

The District does not support the application of minimum mitigation ratios; projects should be evaluated based on the overall benefits and impacts, which depend on site specific conditions. Our experience is that formulaic approaches lead to increased project costs and project delays; these impacts delay the benefits to the wetland/riparian areas which the project is trying to achieve. (L11)

Staff Response:

Staff recommends removing this issue from the 2014 Triennial Review because the State Water Board is currently developing a statewide Water Quality Control Plan for wetland area protection and dredged or fill permitting, and the protections described by this issue are now more fully developed in the Watershed and Integrated Water Resource Protection Issue (above).

Evaluation Score:

11 out of 20.

Recommendation:

Remove this issue from 2014 Triennial Review.

Issue 8: Biostimulatory Substances Objective Revision

Discussion:

The Basin Plan should be amended to revise the narrative biostimulatory substances objective, and possibly replace it with numeric objective(s). Numeric water quality objectives for biostimulatory objectives will provide definitive benchmarks for clean-up of waterbodies impacted by biostimulatory substances. The numeric objectives developed should be linked to protection of specific beneficial uses.

The State Water Board is currently developing a statewide nutrient policy with narrative nutrient objectives. This policy will include guidance to translate the narrative objectives into nutrient numeric endpoints.

Type of Action:

Water Quality Objective Amendment

Public Comment Summary:

City of Santa Maria (L9)

Grower Shipper Association (L10)

Santa Clara Valley Water District (L11)

The City does not support prioritizing the adoption of additional numeric water quality objectives. Narrative objections remain appropriate and conversion of narrative objectives to numeric ones will not facilitate better water quality outcomes. Rather than focusing on adding numeric requirements, the Triennial Review should prioritize an integrated and watershed-based approach to achieving existing objectives. For this reason, the City supports the removal of Issue 8. (L9)

We support Staff's recommendation to remove Issue 8. We also ask that currently approved TMDLs be revised as appropriate following the State's findings on Issues 8. (L10)

The District believes that biostimulatory substances are significant water quality issues, and that each substance needs to be evaluated for dose responses for both acute and chronic exposure as well as for synergistic effects (both positive and negative). The District recommends that the Central Coast Water Board develop a prioritization process for addressing biostimulatory substances as the number of compounds and complexity of the issues will require more than three years to address. The prioritization process can be used to develop Basin Plan priorities in subsequent triennial reviews. (L11)

Additionally, we believe the Central Coast Water Board's Basin Plan should include language to incorporate standards when they become available. This type of language should be amended to the Basin Plan. The District recommends that this issue be maintained as a priority. (L11)

Staff Response:

Staff recommends removing this issue from the 2014 Triennial Review priority list because of the ongoing effort by the State Water Board. Any statewide plan or policy establishing nutrient criteria that is approved by the State Water Board may ultimately result in subsequent Basin Plan amendments to ensure consistency.

Evaluation Score:

14 out of 20.

Recommendation:

Remove this issue from 2014 Triennial Review – State Board actively working on this issue.

Issue 9: Bacteria Objectives for *E. coli* and *Enterococcus*

Discussion:

The Basin Plan should be amended to revise existing bacteria objectives to incorporate an *E. coli* objective for water contact recreation in fresh water surface waters. Such an amendment would include acceptable analytical methods.

The Basin Plan should be revised to incorporate an *Enterococcus* objective for water contact recreation in enclosed bays and estuaries (saline waters). The Basin Plan currently has objectives only for total coliform.

The State Water Board is currently developing a statewide control program to protect recreational users from the effects of pathogens in California waterbodies. The program may include the following:

- new water quality objectives for both fresh and marine waters based on newly released USEPA criteria
- use of a Reference System approach whereby bacteria densities at monitoring points (e.g., beaches) must only be below bacteria densities measured at reference monitoring sites not impacted by human activities.

Type of Action:

Water Quality Objective Amendment

Public Comment Summary:

Grower Shipper Association (L10)

Santa Clara Valley Water District (L11)

We support Staff's recommendation to remove Issue 9. We also ask that currently approved TMDLs be revised as appropriate following the State's findings on Issue 9. (L10)

The District recommends maintaining this issue as a priority. Pathogen indicator sampling should include water quality objectives for both *E. coli* and *Enterococcus*, which is consistent with USEPA recommendations. (L11)

Staff Response:

Staff recommends removing this issue from the 2014 Triennial Review priority list because of the ongoing effort by the State Water Board. Any statewide plan or policy establishing or revising objectives for fecal indicator bacteria that is approved by the State Water Board may ultimately result in subsequent Basin Plan amendments to ensure consistency. In addition, TMDLs currently contain language allowing for re-evaluation of load allocations when water quality objectives are revised.

Evaluation Score:

9 out of 20.

Recommendation:

Remove this issue from 2014 Triennial Review – State Board actively working on this issue.

Issue 10: Designation of Beneficial Uses

Discussion:

Amendments of the Basin Plan are needed to improve the adequacy of present and potential beneficial uses for surface and groundwaters in Chapter 2. Amendments are needed 1) to add or change assignments of beneficial uses to specific waterbodies, 2) to clarify which beneficial uses are designated for all waterbodies in the Central Coast Region, 3) to establish a tributary rule, and 4) to clarify the designation of groundwater beneficial uses.

Beneficial Uses for Specific Water Bodies

Several commenters during the 2009 Triennial Review identified the need to reassess specific beneficial use designations (see the above section titled “The 2009 Triennial Review”):

South Coast Hydrologic Unit

- Remove beneficial uses to Santa Maria River: MUN, REC1, REC2
- Remove beneficial uses to Sycamore Creek: AGR
- Remove beneficial uses to Glen Annie Canyon: AGR
- Remove beneficial uses to Atascadero Creek (SB Co.): AGR
- Remove beneficial uses to Maria Ygnacio Creek: AGR
- Remove beneficial uses to San Jose Creek (SB Co.): AGR
- Remove beneficial uses to San Pedro Creek: AGR
- Remove beneficial uses to Franklin Creek: AGR
- Remove beneficial uses to Carpenteria Creek: AGR

In addition, staff has identified the need to reassess beneficial use designations based on field monitoring and analysis of water quality monitoring data of specific waterbodies:

Bolsa Nueva Hydrologic Unit

- Add beneficial uses to Carneros Creek: AGR & WARM

Salinas Hydrologic Unit

- Add “Old Salinas River” to Table 2-1
- Add beneficial uses to Old Salinas River: AGR, GWR, REC1, REC1, WILD, COLD, WARM, BIGR, SPWN, BIOL, RARE, COMM, SHELL
- Add beneficial uses to Tembladero Slough: AGR, GWR, MIGR
- Add beneficial uses to Espinosa Lake: AGR, GWR
- Add beneficial uses to Espinosa Slough: AGR, GWR
- Add beneficial uses to Salinas Reclamation Canal: AGR, GWR, COLD, MIGR
- Add beneficial uses to Gabilan Creek: COLD, MIGR
- Add beneficial uses to Blanco Drain: AGR, GWR

Santa Maria Hydrologic Unit

- Add beneficial use to Orcutt Creek: WARM
- Add beneficial uses to Arroyo Paredon: COLD

San Antonio Hydrologic Unit

- Add beneficial uses to Shuman Canyon Creek: RARE
- Add beneficial uses to Casmalia Canyon Creek: RARE

Clarification of Beneficial Use Designation for All Water Bodies

Basin Plan language in Chapter 2, section 1 - Present and Potential Beneficial Uses has created some limitations on Central Coast Water Board staff's ability to interpret water quality conditions and apply protective water quality targets. Additionally, the language has led to differing interpretations, internally and with external stakeholders, regarding which beneficial uses and water quality objectives apply to which surface waterbodies. Consequently, the Central Coast Water Board should consider clarifying this language.

For example, the following sentence in Chapter 2,

Surface water bodies within the Region that do not have beneficial uses designated for them not listed in Table 2-1 are assigned the following designations:

- Municipal and Domestic Water Supply
- Protection of both recreation and aquatic life.

could be amended as follows to better indicate which of several possible beneficial are specifically meant by the text:

Surface waterbodies within the Region that are not listed in Table 2-1 are designated the following beneficial uses:

- Municipal and Domestic Water Supply (MUN),
- Protection of recreation (REC-1 and REC-2),
- Protection of aquatic life (COLD or WARM).

This was the subject of a comment during the 2009 Triennial Review by the City of Santa Maria. The City suggested that the following flood control channels not specifically identified in Table 2-1 should not automatically be assigned 1) Municipal and Domestic Water Supply and 2) Protection of both recreation and aquatic life beneficial uses: Blosser, Bradley and West Main Street Channels.

Tributary Rule

Additionally, the Central Coast Water Board can better protect water quality by expanding the designation of beneficial uses from waterbodies with explicitly designated beneficial uses to the upstream tributaries that drain into these waterbodies. This could be done by amending Chapter 2 of the Basin Plan to add a rule that states that beneficial uses designated for any waterbody also apply to that waterbody's upstream tributary.

An example of a tributary definition that could be considered for this Basin Plan amendment was proposed by the USEPA and the Army Corps of Engineers in April 2014 in the *Federal Register*. The proposed rule (79 FR 22188-22274) defines the scope of waters protected under the Clean Water Act and defines the term "tributary" as follows; however, this rule does not address beneficial uses or designations associated with tributaries:

33 CFR 328.3 Definitions. (proposed)

(5) Tributary. The term tributary means a water physically characterized by the presence of a bed and banks and ordinary high water mark, as defined at 33 CFR

328.3(e), which contributes flow, either directly or through another water, to a water identified in paragraphs (a)(1) through (4) of this section. In addition, wetlands, lakes, and ponds are tributaries (even if they lack a bed and banks or ordinary high water mark) if they contribute flow, either directly or through another water to a water identified in paragraphs (a)(1) through (3) of this section. A water that otherwise qualifies as a tributary under this definition does not lose its status as a tributary if, for any length, there are one or more man-made breaks (such as bridges, culverts, pipes, or dams), or one or more natural breaks (such as wetlands at the head of or along the run of a stream, debris piles, boulder fields, or a stream that flows underground) so long as a bed and banks and an ordinary high water mark can be identified upstream of the break. A tributary, including wetlands, can be a natural, man-altered, or man-made water and includes waters such as rivers, streams, lakes, ponds, impoundments, canals, and ditches not excluded in paragraph (b)(3) or (4) of this section.

The proposed rule is located at:

<https://www.federalregister.gov/articles/2014/04/21/2014-07142/definition-of-waters-of-the-united-states-under-the-clean-water-act>

Groundwater Beneficial Uses

The Basin Plan currently states "Ground water throughout the Central Coastal Basin, except for that found in the Soda Lake Sub-basin, is suitable for agricultural water supply, municipal and domestic water supply, and industrial use." This language was originally adopted in the 1975 edition of the Basin Plan. In 1988, the State Water Board adopted the "Sources of Drinking Water" policy, State Board Resolution No. 88-63, which specified that all surface and groundwaters of the State are suitable or potentially suitable for the beneficial use of municipal and domestic water supply (MUN). Resolution No. 88-63 allows the Regional Board some discretion in making MUN determinations. Specifically, exceptions to the Sources of Drinking Water Policy are allowed in groundwater for high total dissolved solids (1a), untreatable contamination (1b), or insufficient gallons per day yield (1c).

It is clear that the 1975 Basin Plan language designates all groundwaters for MUN in the Central Coast Region (except for the Soda Lake Sub-basin, i.e., the Carrizo Plain groundwater basin). The Basin Plan should be clarified to emphasize that the exceptions listed in Resolution 88-63 are only applicable through the Basin Plan amendment process. Thus, exceptions (1a), (1b), and (1c) in Resolution 88-63 may not be used to remove the MUN beneficial use, and the associated effluent limitations, in specific waste discharge requirements.

Chapter 2 should be amended to designate all surface waters that percolate to groundwater in Table 2-1 for groundwater recharge (GWR). Notable exceptions would be waterbodies that are impermeable for their entire reach, such as concrete-lined conveyances. At the very least, all waterbodies that overlay groundwater basins in Figure 2-2 should include the GWR beneficial use. Chapter 2 should include lists and maps of clearly-defined GWR areas.

The Basin Plan groundwater recharge beneficial use definition should be revised to include maintenance of instream flows, riparian habitat, and wetland habitat.

Type of Action:

Beneficial Use Designation Revision
Policy

Public Comment Summary:

City of Santa Cruz (L4)

City of Lompoc (L7)

City of Santa Maria (L9)

Grower Shipper Association (L10)

Santa Clara Valley Water District (L11)

Please consider designation of the POW beneficial use for Newell Creek. As water systems tackle carbon footprint reductions, small hydroelectric projects are increasingly common. The City is currently considering a small inline hydroelectric generator for the fisheries bypass release from Loch Lomond and a beneficial use designation supporting this would be very helpful. (L4)

Please also remove the SHELL beneficial use designation for Loch Lomond Reservoir. While there have never been shellfish in Loch Lomond, the current drought-related drawdown has given us ample opportunity to look for shellfish and they simply are not present in this water body. (L4)

Finally, with ongoing water supply planning that includes alternatives such as desalination and increased attention on marine conservation in general, it seems appropriate to begin consideration of developing beneficial uses for critical marine areas in the region. On this note, MUN should be listed as a future anticipated beneficial use of coastal waters in the region (as it is already being planned for or has occurred previously in the case of Santa Barbara) and water quality objectives relevant to such a designation should also be initiated. (L4)

We believe MUN, AGR, and PROC beneficial uses should not be applied to the Santa Ynez River downstream of Cachuma Reservoir because these surface waters are not now, and have not been, used as a municipal and domestic Supply of water, nor as a source of surface agricultural irrigation water, nor as a source of industrial process water. Considering the upcoming TMDLs for the Santa Ynez River, the erroneous designation of these beneficial uses is expected to result in the development of water quality standards inappropriate to the actual uses of the occasional flows in this river. The cost associated with unnecessarily ensuring all discharges to this waterbody meet related water quality standards for these listed beneficial uses will greatly outweigh the benefit of such improvements, for a river that has not and cannot support these beneficial uses. (L7)

Graves Wetland is mis-identified in the Basin Plan and is locally known as the Bailey Wetland. Some beneficial uses identified in the Basin Plan for Bailey Wetland (REC1, REC2, COMM, SPWN) are not applicable, as there is no water and the area is not hydrologically connected to any other waterbody or waterway. The wetland is a remnant turn in the Santa Ynez River that was cut off and continues as a low spot. It is not connected to any waterway and does not have water in it. The historic wetland area has been fenced off from public access. The wetland was not determined by the U.S. Army Corps of Engineers to meet the criteria for a jurisdictional wetland. (L7)

The City of Santa Maria has repeatedly asked the Regional Board to reassess its approach to the Blosser, Bradley and Main Street channels. Such channels are more properly viewed as being part of the manmade drainage system and should be regulated consistent with section 402(p)(3)(B) of the Clean Water Act (i.e., as municipal stormwater discharges). While the City continues to believe that a different approach to these channels is warranted, the City does not

support prioritizing the type of Basin Plan Amendment contemplated in Issue 10. The proposed approach reflected in Issue 10 would only further inhibit the Watershed and Integrated Water Resource Protection concept reflected in Issue 2. The City suggests deletion of Issue 10 from the Triennial Review as proposed and encourages an emphasis on Issue 2, as revised in the City's comments above. (L9)

Several proposed Basin Plan issues would aggressively and unilaterally expand the role of the [Central Coast] Water Board if ultimately approved. We ask that you remove these priorities such that the role of the Central Coast Water Board can be thoughtfully considered during a thorough vetting process assessing the roles of other local, state, and federal policy and enforcement mechanisms. We urge you to remove the "Tributary Rule" from Issue 10: Designation of Beneficial Uses. This issue is currently being thoroughly vetted by multiple stakeholders at the federal level. We ask that the Central Coast Water Board defer this issue until it can be resolved at the federal level. (L10)

The District is concerned about the incorporation of a tributary rule; surface water quality and beneficial uses vary over time and location. Many beneficial uses that are applicable to the main stem streams do not apply to the tributaries and some of these beneficial uses are conflicting. The District recommends that other approaches, including a reach-by-reach designation, be considered. The Basin Plan should list and identify all tributaries. (L11)

The District supports the beneficial use designation of groundwater recharge for surface water overlying the recharge areas of the groundwater basins. (L11)

Staff Response:

Staff appreciates the specific comments related to the appropriateness of beneficial uses currently in the Basin Plan. Any additions or changes to beneficial uses must be fully supported during a future Basin Plan amendment process. If staff pursues Basin Plan amendments under this overall issue, at that time staff will assess the information provided and consult with the commenters to determine if adequate support exists for the specific Basin Plan amendment.

A full enumeration of beneficial uses for all waterbodies in the Central Coast Region, including tributaries, would eliminate the need to have default beneficial uses. However, this will be resource intensive. In the interim, staff should continue to pursue clarification of beneficial uses for waterbodies not specifically cited in Tables 2-1 and 2-2.

Staff recommends continuing work to clarify the designation of groundwater beneficial uses.

Staff recommends evaluating addition of a tributary rule to the Basin Plan because the discussion of tributaries occurring at the federal level centers around identifying which types of tributaries are waters of the United States, and does not address beneficial uses of tributaries to waters of the State. The Central Coast Water Board, in implementing the California Water Code and the Basin Plan, addresses waters of the State, and is not limited to addressing waters of the United States consistent only with federal authority. However, the definition of "tributaries" in the proposed federal rule should be considered for this amendment.

Evaluation Score:

16 out of 20.

Recommendation:

Prioritize this issue during the 2014 Triennial Review.

Issue 11: Waste Discharge Prohibitions

Discussion:

The California Water Code provides authority to the Regional Water Boards to specify certain conditions or areas where the discharge of waste, or certain types of waste, is not permitted (section 13243). Additionally, the California Water Code provides authority to the Regional Water Boards to take enforcement actions in response to violations of Basin Plan prohibitions (section 13350). Currently, staff cannot take effective enforcement for some cases due to absence of adequate prohibitions.

The main example of a case for which the absence of a prohibition limits enforcement authority for the Central Coast Water Board is the following: if a person is found discharging waste without a permit, the Central Coast Water Board can only take enforcement after written notification and with the first day of the violation when the notice is provided (pursuant to California Water Code section 13260). If the Basin Plan contained a prohibition against discharging without a permit, the Central Coast Water Board could take enforcement action that accounts for the time period the person was discharging without a permit.

The Basin Plan could be amended to add additional prohibitions to enhance the Central Coast Water Boards' authority to use enforcement for more cases that would result in better protection and/or mitigations for illegal discharges. Central Coast Water Board staff could consider the prohibitions currently found in the San Diego Region Basin Plan. For example, prohibitions in the San Diego Region Basin Plan that prohibit discharges of waste without a permit are as follows:

- The discharge of waste to land, except as authorized by WDRs or the terms described in California Water Code section 13264 is prohibited.
- The discharge of pollutants or dredged or fill material to waters of the United States except as authorized by an NPDES permit or a dredged or fill material permit (subject to the exemption described in California Water Code section 13376) is prohibited.

The prohibitions in the San Diego Region Basin Plan are in Chapter 4, Page 16, and can be found on the webpage for the San Diego Regional Water Quality Control Board at this link: http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/docs/update082812/Chpt_4_2012.pdf

In addition, an amendment to the Basin Plan is needed in the Land Disturbance Prohibition in Chapter 4 (section VII.E.1):

The discharge or threatened discharge of soil, silt, bark, slash, sawdust, or other organic and earthen materials into any stream in the basin in violation of best management practices...and in quantities deleterious to fish, wildlife, and other beneficial uses is prohibited.

'Stream' in the previous sentence should be changed to '*waters of the state.*'

This would expand Central Coast Water Board authority to apply this prohibition to many waterbodies not currently afforded such. This change would allow the Central Coast Water

Board to prohibit these discharges to wetlands, lakes, estuaries and the ocean – not just to streams.

Type of Action:

Implementation amendment (new or revised);

Public Comment Summary:

City of Santa Cruz (L4)

We generally support greater enforcement authority for waste discharge violations. However, frequently overland discharge is the only way to drain drinking water system infrastructure (e.g., dead end main flushing as required by California Department of Public Health), and - if conducted with proper BMPs, such as dechlorination, sediment and erosion control - can be done without harm to beneficial uses. Therefore, prohibition of discharges to land should be carefully considered so that beneficial uses are protected without engaging in "mission drift" or otherwise extending the Board's authority inappropriately and so creating conflict with other regulatory and statutory requirements, and without jeopardizing public health and safety by virtue of limiting water system maintenance unnecessarily. (L4)

Staff Response:

Any new prohibition added to the Basin Plan will consider these comments; the prohibition preparation and approval by the Central Coast Water Board will also occur through a public process that will allow the City of Santa Cruz to participate. Staff will research the proposed prohibition to anticipate and avoid possible conflicts with other regulatory requirements.

Evaluation Score:

11 out of 20.

Recommendation:

Prioritize this issue during the 2014 Triennial Review.

Issue 12: Comprehensive Basin Plan Editorial Revisions

Discussion:

The Basin Plan should be amended to revise and eliminate outdated paragraphs, tables, figures, references to outdated Policies, and appendices in the Basin Plan. This includes updates of references (e.g., Title 22, CTR, etc.). Editorial amendments (including revising structure, grammar, punctuation, or citation of changed statutes) to the Basin Plan are considered “nonregulatory” and would not be subject to the California Environmental Quality Act (CEQA) regulations for the State Water Board’s Certified Regulatory Programs (CA Code of Regulations, title 23, sections 3775-3781).

The last comprehensive compilation of the Basin Plan is the June 2011 edition. Basin Plan amendments made after June 2011 are posted on the Central Coast Water Board’s Basin Planning webpage at:

http://www.waterboards.ca.gov/centralcoast/publications_forms/publications/basin_plan/

Based on the Priority List of Issues from the 2009 Triennial Review, the following editorial amendments to the Basin Plan are currently underway:

- Add Vision of Healthy Watersheds and Measurable Goals Language (See Issue: Vision Framework)
- Delete 1988 Triennial Review Language, including Table 1-1
- Revise Groundwater Basins Map (Figure 2-2) and Table 2-2 (See Issue: Groundwater Basin Configurations)
- Correct beneficial use of Salinas River downstream of Spreckles by adding REC-1, which was inadvertently omitted from Table 2-1 in the 1994 Basin Plan
- Correct beneficial use of Soda Lake by adding SAL, which was inadvertently omitted from Table 2-1 in the 1994 Basin Plan
- Correct mercury objective footnote in Tables 3-5 and 3-6
- Add list of TMDLs approved through non-BP amendment processes
- Remove reference to road spreading policy
- Remove language related to the onsite wastewater system implementation program that was not removed under R3-2013-0005
- Revise Description of the State Water Board Groundwater Ambient Monitoring and Assessment Program (GAMA)
- Change “basin” to “region” unless referring to a specific groundwater basin
- Change references to “Chapter 15” to “Title 27” for solid waste disposal
- Correct California Code of Regulations, Title 22 section numbers for drinking water standards cited in Chapter 3. Alternatively, incorporate drinking water standards, prospectively by reference into the Basin Plan
- Replace references to *CA Dept. Fish and Game* to *CA Dept. Fish and Wildlife*
- Add citations in BP for appendices
- Correct typographical errors
- Correct compound word inconsistencies

In addition to the above edits, the Basin Plan needs further amendments to improve the readability and utility of the document. Staff is interested to receive comments on style and formatting issues such as the number of columns per page or the use of Roman numerals for section headings. Other editorial amendments to the Basin Plan might include:

- Add an Index to guide the reader in locating information
- Add a Glossary having definitions of commonly used regulatory words
- Move discharge requirements from the definition of the Areas of Special Biological Significance (ASBS) beneficial use and put in Chapter 4.
- Add clarification sentence in Chapter 3 – “A distinction is made here between the terms ‘water quality objectives’ and ‘water quality standards’. A possible clarifying sentence could be: “Water quality standards (WQS) consist of beneficial uses (BU) plus narrative or numeric water quality objectives (WQO), WQS = BU + WQO.”
- Clarify that the objectives for Nitrate and Nitrite objectives in Table 3-4 are *measured as nitrogen*.
- Spell out chemical names in the header of Table 3-7.
- Delete the no longer used three tiered approach for addressing nonpoint source control in Chapter 4, section V.B, Nonpoint Source Program.
- Delete the outdated Tables 3-1 and 3-2, which reproduce Title 22 drinking water standards.
- Delete historical and outdated descriptions of municipal wastewater dischargers in Chapter 4, VI.B, Municipal Wastewater Management.
- Delete historical and outdated description of the Bay Protection and Toxic Cleanup Program, Chapter 4, VI.F.
- Update Chapter 4 sections on solid waste (IV.K) to reflect correct sections in the California Code of Regulations. For example, “Title 23, Chapter 15” should be amended to “Title 27, Division 2. Subdivision 1 - (Consolidated Regulations for Treatment, Storage, Processing or Disposal of Solid Waste)”; “Title 23, Chapter 15, Article 6” should be amended to “Title 27, Division 2, Subdivision 1, Chapter 7, Subchapter 2 – (Confined Animals)”; “Title 23, Chapter 15, Article 7” should be amended to “Title 27, Division 2, Subdivision 1, Chapter 7, Subchapter 1 – Mining Waste Management”).
- Update Chapter 4 sections on nonpoint source measures (VIII) that contain tasks that have already been implemented or are severely out-of-date.
- Grazing nonpoint source management in Chapter 4, VIII.C.6.a should be updated, for example, it should reference the July 1995 California Rangeland Water Quality Management Plan.
- Update all references in Chapter 5 to current State Plans and Policies.
- Move last five paragraphs of Chapter 5, section IV.C.1 so these requirements apply to all ocean dischargers not just ASBS. These five paragraphs should be moved to Chapter 5, section IV.C, Waters Subject to Tidal Action.
- Delete Chapter 5, section VI.G regarding San Lorenzo Valley loan certification.
- Delete Chapter 5, section VI.H regarding highway grooving residues and VI.K because these waivers are now covered by Resolution R3-2008-0010 (General Waiver of Waste Discharge Requirements for Specific Types of Discharges in the Central Coast Region).
- Update outdated descriptions of the Central Coast Region and water quality problems in Chapter 1.

Type of Action:

Editorial

Public Comment Summary:

City of Lompoc (L7)

Santa Clara Valley Water District (L11)

It has been approximately 20 years since the Basin Plan was written and it is no longer accurate in many areas. A full and considered revision is desirable, to bring the Plan up to date, recognize current conditions, verify the accuracy of beneficial uses, and provide scientifically based, current objectives for surface and groundwater. (L7)

Please revise the description of our municipal wastewater management system in Chapter 4, section VI.B.10 to read: "The City of Lompoc operates a tertiary treatment facility (design average dry weather flow 5.5 mgd; permitted flow 5.0 mgd.) and discharges treated effluent to San Miguelito Creek. The City also provides service to Vandenberg Village Community Services District and sewer areas of Vandenberg Air Force Base. The recommended plan for Lompoc is to control mineral concentrations in the effluent by enforcing strict limits on discharges to the sewer system and to continue to implement a pretreatment program. Implementation of this plan is the responsibility of the City of Lompoc. Vandenberg Air Force Base and Vandenberg Village Community Services District retain ownership and direct responsibility for wastewater collection and transport systems up to the point of discharge into the wastewater treatment plant owned and operated by the City of Lompoc." (L7)

Clarifications and updates are needed, and were suggested, for Chapter 4, section VI.E (Stormwater Management), section VIII.B (Urban Runoff Management). (L7)

Suggested language was offered for Chapter 5, section V.H.9 (Seawater Intrusion) as follows: "The potential for, and effects of, sea water intrusion into ground water basins should be considered when actions that could affect groundwater quality and quantity, such as increases in pumping of groundwater, are considered. Sea Water intrusion into groundwater basins should be limited and discouraged to the maximum extent practicable, and by the same token, activities that reduce sea water intrusion should be recognized and encouraged for that benefit." (L7)

The Santa Clara Water District (L11) has the following additional editorial comments:

- The District concurs with the suggestion to "Add list of TMDLs approved through non-BP amendment processes" and suggests that all tributaries be listed and identified for waters listed in all TMDLs.
- Change all references for the California Department of Public Health to the State Water Resources Control Board Division of Drinking Water.
- Chapter 1, page 1-4: The average annual precipitation per capita and population should be updated to reflect the 2010 census.
- Chapter 2. Table 2-3: San Benito County is referenced in several places as Benito; this table should be revised to correct this.
- Chapter 3. Agricultural and Irrigation Water Quality Objectives: The District recommends revising Tables 3-3 (Guidelines for Interpretation of Quality of Water for Irrigation) and 3-4 (Water Quality Objectives for Agricultural Water Use) to better describe the objectives and their intended use. For example, Table 3-3 contains numeric objectives related to "increasing problems" or "severe" problems, but the first footnote says the guidelines are "flexible and should be modified when warranted ... " The objectives in both tables should also be re-evaluated considering more recent studies, and adjusted as necessary.

- Chapter 4, section VI.B.2. Pajaro River Hydrologic Unit (page IV-15, 16): The discussion states: "The recommended plan for the Gilroy-Morgan Hill wastewater treatment facilities is to continue geohydrological assessments to determine impacts of continued effluent disposal by percolation at the Gilroy site." The District recommends that this discussion be updated.
- Chapter 4, section VI.B.2. A paragraph on San Martin discusses the occurrence of nitrate in groundwater and recommends calculating the loading rate from different sources. The District recommends updating this discussion using nitrate results from the District's domestic well testing and groundwater monitoring programs and the draft Llagas Subbasin Salt and Nutrient Management Plan, which includes regional loading calculations.
- Chapter 4, section VI.E. Storm Water Management (page IV-26): This section focuses on the pollution control and control of storm water runoff. The District supports these efforts. Over the past several years there has been an increasing effort to capture and use storm water runoff, including within the State Water Resources Control Board's Recycled Water Policy. The District recommends updating this discussion to include the State policy and address the balance between storm water runoff capture and use and groundwater pollution prevention.
- Chapter 4, section VI.I. Underground Storage Tank Program (page IV-34): The District recommends that this section be updated to include a discussion of the State's low threat closure policy.
- Chapter 4, section VIII.C. The existing Basin Plan in the Agricultural and Waste Water Management section (page IV-48) states: "Pesticide use and limits on fertilizer applications are not specifically considered; these materials are covered by appropriate water quality objectives." The District believes that application of pesticides and fertilizers should be specifically addressed in the Basin Plan. The plan should also reference and incorporate key language from the *Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Land, Order No. R3-2012-0011*, dated March 15, 2012.
- Chapter 4, section VIII.D. Individual, Alternative, And Community Disposal Systems (page IV-59): The District recommends that this discussion be updated to be consistent with the State's on-site waste treatment system policy and Santa Clara County's 2013 ordinance.

Staff Response:

Staff appreciates the suggested Basin Plan language revisions. Staff will assess which of these can be incorporated into the non-regulatory Basin Plan amendments planned for 2015 (based on current resources available and existing schedule for completing this amendment). For those revisions that cannot be added, staff will evaluate resources and a schedule to support making additional revisions during a future Basin Plan amendment process. If staff pursues Basin Plan amendments under this overall issue, at that time staff will assess the information provided to determine if it adequately supports a specific Basin Plan amendment.

Evaluation Score:

9 out of 20.

Recommendation:

Prioritize this issue during the 2014 Triennial Review.

Issue 13. Regulation and Monitoring for Antibiotic-Resistant Pathogens

Discussion:

Commenters argue that antibiotic-resistant pathogens have the potential to pose a public health risk. Water quality objective and monitoring programs for antibiotic resistant pathogens could reduce this potential risk. Issue 13 was added to this report in response to public comments.

Type of Action:

Water Quality Objective Amendment

Public Comment Summary:

Dr. Edo McGowan (L1, L5, L6)

Dr. John Ackerman (L2)

The following summarized comments were submitted by Edo McGowan (L1, L5, L6).

The effective use of antibiotics and microbials is being reduced by the presence of antibiotic-resistant pathogens in wastewater effluent. Antibiotic-resistant pathogens and their genes are generated and released by currently-designed wastewater treatment plants and are present in disinfected recycled water. The uncontrolled release of antibiotic-resistant pathogens constitutes a serious public health risk. This topic has been a low priority for the Regional and State Water Board.

We have presented evidence that the state's standardized tests for water quality (i.e., the MPN tests) are failing to alert the regulatory community and citizens of health risks associated with this treated wastewater.

The [Central Coast] Water Board should set up a program for assessment of waters using sufficient laboratory tests to look at resistant organisms and their genes. The paper by Fahrenfeld *et al* (Fahrenfeld, N., Ma, Y., O'Brien, M., and Pruden, A. 2013. *Reclaimed water as a reservoir of antibiotic resistance genes: distribution system and irrigation implications*. Front. Microbiol. 4:130, <http://journal.frontiersin.org/Journal/10.3389/fmicb.2013.00130/full>), gives the lab protocols for accomplishing this. These qPCR tests are in common usage by the scientific community. When used to analyze recycled water, the results have demonstrated that we have serious problems, yet the regulatory community seems to be having trouble in implementing such tests.

Is there any reason why the Board or your Agency can not run such tests? If you are prohibited from doing so for some reason, please explain in detail such reason. Perhaps if the Legislature understands this and recognizes it as an impediment for correctly protecting public health, we will at least accomplish something. Is it not your function to come up with suggestions for inclusion of programs to protect public health?

Dr. McGowan's comments were supported by Dr. John Ackerman (L2).

Evaluation Score:

8 out of 20.

Staff Response:

The 2009 State Recycled Water Policy convened a Constituents of Emerging Concern (CEC) Advisory Panel to address questions about regulating CECs with respect to the use of recycled

water. In June 2010, the CEC Advisory Panel provided recommendations to the State Water Board and California Department of Public Health in their Final Report:
http://www.waterboards.ca.gov/water_issues/programs/water_recycling_policy/docs/cec_monitoring_rpt.pdf.

The Advisory Panel concluded that the potential public health risk associated with exposure to pathogens in recycled water used for landscape irrigation or groundwater recharge is very small. However, the Advisory Panel acknowledged that some uncertainties exist regarding the occurrence of emerging waterborne microbial pathogens and encouraged additional research into their fate in water reuse systems. The Panel realized that the issue is complex and recommended that a more appropriate panel (e.g., Centers for Disease Control and Prevention) complete a more thorough review and validate the Panel's preliminary conclusions.

The State Water Board's Division of Drinking Water is responsible for establishing uniform statewide recycling criteria for recycled water where the use involves the protection of public health (California Water Code section 13521). Prior to July 2014, the Drinking Water Division was within the California Department of Public Health. California regulations for groundwater replenishment using recycled water became effective on June 18, 2014. In addition, an Expert Panel was recently appointed to report to the Legislature on the feasibility of developing uniform water recycling criteria for direct potable reuse. Information on the Division of Drinking Water's Recycled Water Program is found at the following website:

http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/RecycledWater.shtml

Given that the State Water Board is currently developing a statewide control program to establish criteria for uses of recycled water and that the CEC Advisory Panel has recommended a more thorough review of this issue, staff plans to track these efforts and recommends that this issue be removed from the Basin Plan Triennial Review list. Furthermore, any new program, regulation or Basin Plan Amendment proposed by either the State Water Board or the Central Coast Water Board must be supported by data and evidence of the presence, impacts and potential methods of resolving impacts and sources of antibiotic-resistant pathogens; therefore, it is premature for the Central Coast Water Board to consider a Basin Plan Amendment ahead of adequate characterization of the problem and presence in Central Coast waters.

Recommendation:

Remove this issue from 2014 Triennial Review – State Board is actively working on this issue.

Issue 14: Regulation of Desalination Facilities

Discussion:

The Central Coast Water Board should develop water quality standards and implementation amendments to the Basin Plan to minimize the effects of brine discharges from desalination facilities, prohibit open ocean intakes, and prohibit outfalls in Marine Protected Areas. Issue 14 was added to this report in response to public comments.

Type of Action:

Water Quality Objective Amendment
Implementation Amendment

Public Comment Summary:

Greenspace (L8)

Our organization and others are very concerned about the impacts of desalination/reverse osmosis plants being introduced on the California coast. Given the drive for desalination in California, it is critical that the Regional Board develop high standards to minimize the effects of brine discharges and their constituents, prohibit open ocean intakes, prohibit outfalls in Marine Protected Areas and make sure desalination is the last choice - not the first choice for an alternative water supply, as is the case in Cambria. We understand that broad discretion is given to the Regional Water Boards on a case by case basis in adopting language for permits for desalination and discharge of wastes.

We suggest the [Central Coast] Water Board incorporate more detailed language on desalination into the Basin Plan as offered by the CA Coastkeepers Alliance and the CA Coastal Protection network letters submitted to the State Water Board on August 19, 2014:

http://www.waterboards.ca.gov/water_issues/programs/ocean/desalination/comments081914/docs/sean_bothwell.pdf

http://www.waterboards.ca.gov/water_issues/programs/ocean/desalination/comments081914/docs/joe_geever.pdf

These comment letters were submitted in response to the July 2014 draft Amendment to the Water Quality Control Plan for Ocean Waters of California (Ocean Plan) addressing desalination facility Intakes, brine discharges.

Staff Response:

Staff agrees that the operation and construction of desalination facilities may result in harm to marine aquatic life beneficial uses. Currently, Regional Water Boards regulate brine discharges from these types of facilities through the issuance of National Pollutant Discharge Elimination System (NPDES) permits that contain conditions to protect aquatic life when discharging to the aquatic environment. Similarly, waste brine discharged to land would require a Waste Discharge Requirement (WDR) permit from the Regional Water Board. In addition, Issue 15, Ocean Protection (see below), should incorporate the ocean discharge comments and observations made by this commenter.

State Water Board staff is currently developing amendments to the Ocean Plan that will address issues associated with desalination facilities (Desalination Amendment). These amendments may result in a water quality objective for elevated salinity levels in the ocean and describe how

brine discharges are to be regulated and controlled. The Ocean Plan already contains a prohibition of discharges into Areas of Special Biological Significance (ASBS). State Water Board staff anticipates that the Ocean Plan amendment will be completed in fall 2014.

Given that the State Water Board is currently developing a statewide control program to establish regulation of desalination facilities, staff recommends that this issue be removed from the Triennial Review list.

Evaluation Score:

8 out of 20.

Recommendation:

Remove this issue from 2014 Triennial Review – State Board actively working on this issue.

Issue 15: Ocean Protection

Discussion:

This issue was added to the Brief Issue Descriptions document released on July 30, 2014, in response to ocean protection public information distributed by agencies and advocacy organizations recently, and to final staff review of CCAMP data and information that might identify gaps in the issues previously identified for the Triennial Reviews and distributed to the public. The Central Coast Region's watersheds drain directly to the Pacific Ocean. Rivers and streams that travel from upland areas to the ocean carry and discharge many pollutants. The Central Coast Ambient Monitoring Program (CCAMP) has collaborated with researchers from U.C. Davis and the California Department of Fish and Wildlife to investigate linkages between marine mammal deaths and loading of land-based pollutants to the ocean. In addition, CCAMP and the Surface Water Ambient Monitoring Program (SWAMP) have evaluated coastal confluences for pollutants and associated toxicity, and coastal fish and shellfish tissue concentrations for chemical concentrations of concern. These evaluations support the following:

- Dozens of sea otter deaths have been linked to microcystin toxicity. Microcystin is associated with freshwater blue-green algae species and causes severe liver toxicity. Otter deaths suggest that animals and humans are at risk from microcystin poisoning when consuming shellfish harvested at the land-sea interface.¹
- Sea otters in California are commonly infected with *Toxoplasma gondii*, believed to come from feline fecal contamination flowing from land to sea through surface runoff; otters can be infected through filter-feeding marine invertebrates.²
- A survey of contaminants in coastal sport fish tissue has indicated that methylmercury accumulation is of high concern and PCBs reached levels of moderate concern in the Central Coast Region.³
- CCAMP modeling of nutrient loading from larger agricultural watersheds shows that upland areas are a large source of nitrate, ammonium, and other nutrients to estuarine and marine waters.⁴ Areas of locally high nutrient concentrations may play a role in algal bloom initiation; a 5-year study is currently underway to investigate bloom "hot spots" in association with upwelling and coastal land use

¹ Miller, M.A., R.M Kudela, A. Mekebri, D. Crane, S.C. Oates, M.T. Tinker, M. Staedler, W.A. Miller, S. Toy-Choutka, C. Dominik, D. Hardin, G. Langlois, M. Murray, et al. 2010. *Evidence for a Novel Marine Harmful Algal Bloom: Cyanotoxin (Microcystin) Transfer from Land to Sea Otters*. PLoS ONE 5(9): e12576. doi:10.1371/journal.pone.0012576, <http://www.plosone.org/article/info%3Adoi%2F10.1371/journal.pone.0012576>

² Miller, M.A., W.A. Miller, P.A. Conrad, E.R. James, A.C. Melli, C.M. Leutenegger, H.A. Dabritz, A.E. Packham, D. Paradies, M. Harris, J. Ames, D.A. Jessup, K. Worcester, and M.E. Grigg. 2008. *Type X *Toxoplasma gondii* in a wild mussel and terrestrial carnivores from coastal California: New linkages between terrestrial mammals, runoff and toxoplasmosis of sea otters*. International Journal for Parasitology 38(11):1319-28. Epub 2008 Feb 26, http://www.ccamp.org/ccamp/documents/Miller_2008_TypeX.pdf

³ Davis, J.A., J.R.M. Ross, S.N. Bezalel, J.A. Hunt, A.R. Melwani, R.M. Allen, G. Ichikawa, A. Bonnema, W.A. Heim, D. Crane, S. Swenson, C. Lamerdin, M. Stephenson, and K., Schiff. 2010. *Contaminants in Fish from the California Coast, 2009-2010: Summary Report on A Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP)*. California State Water Resources Control Board, CA. http://www.swrcb.ca.gov/water_issues/programs/swamp/docs/coast_study/bog2012may/coast2012report.pdf

(<http://oceandatacenter.ucsc.edu/MBHAB/hotspots/>). Studies by Elkhorn Slough Estuarine Research Reserve show highly eutrophic waters in areas of Elkhorn Slough, an important Marine Protected Area, with very high concentrations of nutrients entering the Reserve on incoming tides from adjacent watershed discharge.⁴ Eutrophication and associated decay of algal blooms is linked in some areas to ocean acidification.⁵

The sources of these contaminants are urban and agricultural areas in the Central Coast Region, where wastewater treatment facilities, stormwater drainage facilities, power plants, desalination facilities, roads, and irrigated agriculture impact the ocean through discharges of pollution or wastes, even though many of these waste streams and pollution loads are treated and/or permitted to minimize impacts. Furthermore, population increases and desire to live in coastal communities in California further pressures the ocean with potential impacts of urban development (increased pollution loading and hydrologic and geomorphic changes to streams and coastlines).

In March 2012, the Center for Ocean Solutions published a report titled: *Why Ocean Acidification Matters to California, and What California Can Do About It: A Report on the Power of California's State Government to Address Ocean Acidification in State Waters*.⁶ This report explains the science and evidence of ocean acidification and recommends legal and policy options that can address the problems. In addition to explaining the classic cause of ocean acidification, i.e., atmospheric carbon dioxide, the report also explains indirect drivers of ocean acidification. This includes nutrient runoff, which plays an important role in altering marine carbonate chemistry. Nutrient pollution causes local acidification through feedback loops involving biological growth, metabolism, and decay, over and above that which would occur in the absence of nutrient input from humans. These processes use more oxygen than they produce, causing oxygen minimum zones ("dead zones"), and resulting in locally-acidified waters. More acidic, lower-oxygen waters are likely to have both chronic and acute environmental impacts, including a decline in biomass productivity important to fisheries.

The California Water Code provides the State and Regional Water Boards with comprehensive authority to address all factors and activities that affect water quality, including ocean water quality. Water Code section 13050(i) states that "water quality control" means the regulation of *any activity or factor* which may affect the quality of the waters of the state (*emphasis added*). However, the current Basin Plan does not comprehensively address all factors and activities that affect ocean water quality.

⁴ Lane, J.Q., D.M. Paradies, K.R. Worcester, and R.M. Kudela. 2009. *Description of freshwater eutrophic sources to Monterey Bay, California with categorization according to nutrient ratio characteristics*. Poster presentation at Coastal and Estuarine Research Federation (CERF) Conference, Portland, OR, Nov 2 - 5, 2009. http://www.ccamp.org/ccamp/documents/CERF2009_JQLane_poster_FINAL.pdf

⁴ Caffrey, J.M., N. Harrington, and B. Ward. 2002. *Biogeochemical processes in a small California estuary. 1. Benthic fluxes and pore water constituents reflect high nutrient freshwater inputs*. Marine Ecology-Progress Series **233**:39-53. <http://www.int-res.com/articles/meps2002/233/m233p039>.

⁵ Sunda, W.G. and W. Cai. 2012. *Eutrophication Induced CO₂-Acidification of Subsurface Coastal Waters: Interactive Effects of Temperature, Salinity, and Atmospheric P_{CO₂}*. CCFHR, National Ocean Service, National Oceanic and Atmospheric Administration. Environ. Sci. Technol. **46** (19), pp 10651–10659. DOI: 10.1021/es300626f. <http://pubs.acs.org/doi/abs/10.1021/es300626f>

⁶ Kelly, R.P. and M.R. Caldwell. 2012. *Why Ocean Acidification Matters to California, and What California Can Do About It: A Report on the Power of California's State Government to Address Ocean Acidification in State Waters*. Center for Ocean Solutions. Stanford Woods Institute for the Environment, Stanford University, California. <https://woods.stanford.edu/sites/default/files/files/OceanAcidification.pdf>

The authority and implementation programs currently provided in the Basin Plan focus primarily on controlling specific pollutant discharges from facilities, urban areas, and agricultural areas and support some beneficial uses (e.g., establishing effluent limits in waste discharge requirements for the discharge that ensure receiving waters meet municipal and domestic drinking water supply water quality objectives). However, these existing authorities and implementation programs do not fully address impacts to the ocean.

Modifications to Basin Plan prohibitions, objectives, implementation conditions, policies, guidelines, and incentives would better address the highest priority factors and activities to improve the Central Coast Water Board's protection and restoration of the quality of and beneficial uses of the ocean.

For example, the Central Coast Water Board could 1) strengthen existing water quality standards for marine and estuarine waters to reflect current information on nutrients and carbonate chemistry parameters, including pH; 2) develop criteria for other parameters related to ocean acidification, such as total alkalinity and dissolved inorganic carbon; and 3) designate additional beneficial uses of coastal waters to improve ecological resilience. More stringent water quality criteria could better protect coastal ecosystems via implementation under existing National Pollutant Discharge Elimination System (permitting) and Total Maximum Daily Load (pollutant reduction) programs where existing technology-based standards are insufficient to safeguard the receiving waters. If enforced, these criteria could alleviate both the ultimate (e.g., nutrient loading) and proximate (pH change) causes of locally-intensified ocean acidification. Designating new beneficial uses for sensitive coastal waters could more quickly trigger protection from additional point source discharges and would require limiting inputs from existing dischargers.

To ensure that water quality and beneficial uses of ocean waters are fully protected and restored, staff proposes to amend the Basin Plan to develop the authority to adequately address all relevant factors and activities that affect them. Staff will investigate the most critical types and locations of ocean impacts to address and the most appropriate types of Basin Plan amendments to address these impacts. Basin Plan amendments will be tailored to best address the types and locations of impacts identified as highest priority. These amendments and follow-up actions may include prohibitions, beneficial use definitions, water quality objectives, implementation measures, policies, permit terms, guidelines, and incentives.

Concerns by *Heal the Bay* and the *California Coastkeeper Alliance* over acidification of marine waters prompted the State Water Board to include this issue in the 2011-2013 Triennial Review for the Water Quality Control Plan for Ocean Waters of California (Ocean Plan) as a high priority issue

(http://www.waterboards.ca.gov/water_issues/programs/ocean/docs/trirev/trirev2011_13.pdf).

State Water Board staff responded that the current Ocean Plan narrative chemical and biological water quality objectives are protective of marine aquatic life, but acknowledged that more monitoring and assessment should take place.

Type of Action:

Beneficial Uses
Water Quality Objectives
Implementation/Policy

Public Comment Summary:

Since this issue was added to the report by staff, as explained above, after public comments, no public comments were submitted on this issue. However, comments made in Issue 14, Regulation of Desalination Facilities (see above), should be considered in evaluating this as a Basin Plan amendment.

Staff Response:

No response needed.

Evaluation Score:

15 out of 20.

Staff Recommendation:

Prioritize this issue during the 2014 Triennial Review.

Summary of Issue Evaluations

Table 3 presents the evaluation score that staff assigned for each criterion for each Triennial Review Issue considered in this report. Issues recommended for removal from the 2014 Triennial Review Priority List are indicated based on the issue discussions.

Table 3. Evaluation Criteria Scores for each Triennial Review Issue

Issue No.	Issue Description	Evaluation Criteria ⁷				Total Score	Remove from Priority List? ⁸
		Vision Alignment	Water Qual. Std. Improvement	Effectiveness	Public Interest		
1	Vision Framework	5	3	2	2	12	
2	Watershed and Integrated Water Resource Protection	5	2	5	5	17	
3	Groundwater Recharge Area Protection	4	1	4	3	12	Yes
4	Revision of Water Quality Objectives for Specific Waterbodies	4	5	3	3	15	
5	Groundwater Basin Configurations Update	4	2	3	1	10	
6	Aquatic Life Protection	4	5	3	2	14	
7	Aquatic Habitat Protection / Riparian Buffer Zone Protections	4	2	4	1	11	Yes
8	Biostimulatory Substances Objective Revision	4	4	4	2	14	Yes
9	Bacteria Objectives for <i>E. coli</i> and <i>Enterococcus</i>	2	3	2	2	9	Yes
10	Designation of Beneficial Uses	4	5	3	4	16	
11	Waste Discharge Prohibitions	3	3	4	1	11	
12	Comprehensive Basin Plan Editorial Revisions	2	2	2	3	9	
13	Regulation and Monitoring for Antibiotic-Resistant Pathogens	2	3	2	1	8	Yes
14	Regulation of Desalination Facilities	1	2	2	3	8	Yes
15	Ocean Protection	4	4	4	3	15	

⁷ The ranking criteria are as follows:

- **Vision Alignment** - Does the issue align with the Central Coast Water Board's Vision, Measurable Goals, and priorities (stated above)?
- **Water Quality Standards Improvement** - Will the issue improve water quality standards through new or revised beneficial uses or water quality objectives?
- **Effectiveness** - Will the issue advance water quality protection by improving 1) regulatory and program efficiency, or 2) legal authority to regulate activities that negatively impact water quality and watershed processes?
- **Public Interest** - Does the issue have a high perceived public interest?

⁸ All of the issues with "Yes" in the column are recommended for removal because the State Water Board is working on a parallel project.

2014 Triennial Review Priority List

A prioritized list of Basin Planning projects based on the 2014 Triennial Review is presented in Table 4. The Table orders the issues from highest score/priority to lowest. Regardless of score, issues that staff recommended removing from list (mostly due to State Water Board working on parallel issue project) are not included below.

Based on available Basin Planning resources of approximately two personnel per year (PY), staff anticipates that Central Coast Water Board staff can complete Basin Plan Issue Priorities 1 – 8 within the next three years, if all resources are spent on the Priority Issues listed below.

Table 4. Recommended Priority List of Issues to be Evaluated as Basin Plan Amendments

Priority	Score	Issue	Description	Est. Resource Needs (PY)
1	17	Watershed and Integrated Water Resource Protection	Amend the Basin Plan to develop authority to address the highest priority activities and factors that affect waters. Amendments will focus on achieving preservation and restoration of watershed processes through implementation of integrated water resource management planning. These amendments and follow-up actions may include prohibitions, beneficial use definitions, water quality objectives, implementation, policies, permit terms, guidelines, and incentives.	1.5
2	16	Designation of Beneficial Uses	Evaluate adequacy of existing Basin Plan beneficial use designations for specific surface waterbodies and for waterbodies not named in Tables 2-1 or 2-2. Clarify the designation of groundwater beneficial uses. Establish a tributary rule.	1.0
3	15	Revision of Water Quality Objectives for Specific Waterbodies	In coordination with groundwater management and other water resources agencies, revise water quality objectives (for chloride, sulfate, boron, sodium, nitrate, and total dissolved solids) in surface waters (Table 3-7) and groundwaters (Table 3-8) based on historical data using statistically-defensible methods. Link these objectives to specific beneficial uses, such as municipal and domestic supply (MUN).	1.0
4	15	Ocean Protection	Amend the Basin Plan to develop the authority to adequately address all relevant factors and activities that contribute to ocean water quality. Strengthen existing water quality standards in the Basin Plan for marine and estuarine waters by developing water quality objectives (for pH, nutrients, carbonate chemistry parameters, total alkalinity, or dissolved inorganic carbon) and by designating additional beneficial uses for sensitive coastal waters.	1.5
5	14	Aquatic Life Protection	Adopt numeric water quality objectives for several Basin Plan narrative water quality objectives, including turbidity and toxicity, which protect aquatic life beneficial uses.	0.6
6	12	Vision Framework	Formally incorporate the Central Coast Water Board's Vision of Healthy Watersheds into the Basin Plan.	0.1

Priority	Score	Issue	Description	Est. Resource Needs (PY)
7	11	Waste Discharge Prohibitions	Add enforceable language to the Basin Plan to prohibit the discharge of wastes to land and the discharge of pollutants or dredged or fill materials to state waters.	0.4
8	10	Groundwater Basin Configurations Update	Update groundwater basin configurations in Basin Plan Table 2-3 and Figure 2-2 using the 2003 Department of Water Resources Bulletin No.118 and other sources.	0.1
9	9	Comprehensive Basin Plan Editorial Revisions	Revise and eliminate outdated paragraphs, tables, figures, references to outdated Policies, and appendices in the Basin Plan.	0.5

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