

Staff Report
for the
Proposed Amendment
to the
WATER QUALITY CONTROL PLAN
for the
NORTH COAST REGION
to
Update Water Quality Objectives

February 3, 2012



State of California
North Coast Regional Water Quality Control Board
5550 Skylane Boulevard, Suite A
Santa Rosa, California 95403
707-576-2220

www.waterboards.ca.gov/northcoast

<u>Section</u>	<u>Page Number</u>
1. Executive Summary.....	1-1
1.1 Summary of the Proposed WQO Update Amendment	1-1
1.2 Staff Determination.....	1-2
2. Introduction.....	2-1
2.1 Overview of the North Coast Region	2-1
2.2 Function and Framework of the Basin Plan	2-2
2.3 Background on the Proposed WQO Update Amendment.....	2-4
2.4 Goals of the Proposed WQO Update Amendment	2-4
2.5 Proposed WQO Update Amendment Revisions	2-5
2.6 Public Participation	2-6
3. Proposed Revisions to Basin Plan Chapter 3 - Water Quality Objectives	3-1
3.1 Revisions to “Introduction” Section	3-1
3.2 Revision to “General Water Quality Objectives” Section.....	3-2
3.2.1 Revisions to the “Antidegradation Policies” Section	3-2
3.2.2 Addition of a Proposed General Water Quality Objective for “Minimum Chemical Constituents Levels for Municipal and Domestic Water Supplies” ..	3-2
3.3 Revisions to “Objectives for Ocean Waters” Section	3-4
3.4 Revisions to “Objectives for Inland Surface Waters, Enclosed Bays, and Estuaries” Section	3-4
3.4.1 “Bacteria” Objective	3-5
3.4.2 “Biostimulatory Substances” Objective	3-5
3.4.3 Revisions to “Chemical Constituents” Objective.....	3-5
3.4.4 “Color” Objective	3-6
3.4.5 Revisions to “Dissolved Oxygen” Objective.....	3-6
3.4.6 “Floating Material” Objective.....	3-6
3.4.7 “Oil and Grease” Objective	3-6
3.4.8 Revisions to “Pesticides” Objective	3-7
3.4.9 Revisions to “pH” Objective	3-7
3.4.10 Revision to “Radioactivity” Objective	3-8
3.4.11 “Sediment” Objective	3-8
3.4.12 “Settable Material” Objective	3-8
3.4.13 “Suspended Sediment” Objective.....	3-9
3.4.14 Revisions to “Tastes and Odors” Objective	3-9
3.4.15 Revisions to “Temperature” Objective	3-9
3.4.16 Revisions to “Toxicity” Objective	3-10
3.4.17 “Turbidity” Objective	3-11
3.5 Revisions to Tables 3-1 and 3-1a - “Specific Water Quality Objectives”	3-11
3.6 Revisions to Table 3-2 - “Inorganic, Organic, and Fluoride Concentrations Not to be Exceeded in Domestic or Municipal Supply”	3-12
3.7 Revision to “Water Quality Objectives for Groundwaters” Section.....	3-13
3.7.1 “Bacteria” Objective.....	3-14
3.7.2 Revisions to “Chemical Constituents” Objective.....	3-14
3.7.3 Revisions to “Radioactivity” Objective	3-14

<u>Section</u>	<u>Page Number</u>
3.7.4	Revisions to “Tastes and Odors” Objective 3-15
3.7.5	Addition of a Groundwater “Toxicity” Objective 3-15
3.8	Revisions to “Compliance with Water Quality Objectives” Section 3-18
4.	Proposed Revisions to Basin Plan Chapter 4 - Implementation Plans 4-1
4.1	Addition of Proposed “Policy for the Application of Narrative Water Quality Objectives” 4-2
4.2	Revisions to “Compliance Schedule Policy” 4-4
5.	California Environmental Quality Act Requirements 5-1
5.1	Description of the Proposed Project 5-2
5.2	Identification of Significant Adverse Environmental Impacts..... 5-4
5.3	Analysis of Reasonable Alternatives to the Proposed Activity 5-4
5.4	Environmental Analysis of Compliance Methods 5-4
5.5	CEQA Environmental Checklist, Staff Determination, and Findings 5-4
5.5.1	Environmental Checklist Project-Specific Information 5-5
5.5.2	CEQA Environmental Checklist..... 5-7
5.5.3	Preliminary Staff Determination..... 5-17
5.5.4	Discussion of Environmental Checklist Findings 5-18
5.6	Economic Analysis 5-43
6.	Antidegradation Analysis 6-1
6.1	Antidegradation Analysis for the Proposed WQO Update Amendment 6-3
7.	Water Quality Objectives Analysis 7-1
7.1	Beneficial Uses of Water in the North Coast Region 7-1
7.2	Environmental Characteristics of the Hydrographic Units..... 7-3
7.3	Achievable Water Quality Conditions 7-4
7.4	Economic Considerations 7-5
7.5	Development of Housing Within the Region 7-5
7.6	Need to Develop and Use Recycled Water 7-5
7.7	Implementation Program 7-6
8.	Public Participation Plan 8-1
8.1	Framework for Stakeholder Involvement 8-1
8.2	Regional Water Board Adoption Hearing..... 8-2
Appendix A:	Basin Plan Chapter 3 Update Language (strikethrough/underline)A-1
Appendix B:	Basin Plan Chapter 4 Update Language (strikethrough/underline)B-1
Appendix C:	Basin Plan Chapter 3 Update Language (clean version) C-1

1. Executive Summary

The *Proposed Amendment to the Water Quality Control Plan for the North Coast Region to Update Water Quality Objectives* (proposed WQO Update Amendment) is under development by staff of the North Coast Regional Water Quality Control Board (Regional Water Board). The proposed WQO Update Amendment to the *Water Quality Control Plan for the North Coast Region* (Basin Plan) includes a number of actions relative to updating water quality objectives for both surface waters and groundwaters in the North Coast Region. The primary goals of the proposed WQO Update Amendment are to develop a narrative groundwater toxicity objective, to develop a new general chemical constituents objective for municipal and domestic water supplies to replace Table 3-2, and to clarify the process the Regional Water Board uses when narrative objectives are translated into numeric limits for use in permits, orders, or other Board actions. Other revisions to the Basin Plan are included as part of this proposed amendment to utilize Regional Water Board staff resources as efficiently as possible. Support for these proposed revisions are also included in this Staff Report.

The proposed Basin Plan amendment language is appended to this Staff Report for the reader's convenience. This Staff Report provides the necessary information relative to the scope, need, and potential environmental impacts of the proposed WQO Update Amendment. The revisions proposed in the WQO Update Amendment are summarized below.

1.1 Summary of the Proposed WQO Update Amendment

Both substantive and non-substantive (editorial) revisions to Chapter 3 – Water Quality Objectives and Chapter 4 – Implementation Plans of the Basin Plan are included as part of the proposed WQO Update Amendment. In addition, the Table of Contents and other applicable portions of the Basin Plan (e.g., Appendix A) will be revised as appropriate.

Proposed revisions to Chapter 3 - Water Quality Objectives are presented below:

- Addition of a new narrative toxicity objective for groundwater.
- Deletion of Table 3-2, *Inorganic, Organic, and Fluoride Concentrations Not to be Exceeded in Domestic or Municipal Supply*.
- Addition of a new general chemical constituents objective for municipal and domestic water supplies to replace Table 3-2.
- Revision of existing numeric and narrative objectives to update language, improve clarity, and reference the proposed general chemical constituents objective for municipal and domestic water supplies in place of Table 3-2 as appropriate.
- Minor revisions to Table 3-1, *Specific Water Quality Objectives for North Coast Region* and Table 3-1a. Includes reformatting of information contained in Table 3-1, relocating information contained in footnote 5 to a new Table 3-1b (*Specific Objectives for Temperature in the Upper Trinity River*), and addition of a title to

Table 3-1a (*Site-Specific Objectives (SSOs) for Dissolved Oxygen (DO) in the Mainstem Klamath River*). Tables relocated to end of chapter to improve readability.

- Revision of the Compliance with Water Quality Objectives section to include a discussion on compliance with water quality objectives for non-NPDES programs. Includes a discussion relative to the use of the proposed Narrative WQO Policy.
- Addition of references to the National Toxics Rule (NTR), California Toxics Rule (CTR), and the State Water Board *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries* (SIP) to inform the reader of their applicability to surface waters in the North Coast Region.

Proposed revisions to Chapter 4 - Implementation Plans are presented below:

- Addition of a new section heading, “Regionwide Policies” to be inserted at the beginning of the chapter just after the introductory language.
- Addition of a new *Policy for the Application of Narrative Water Quality Objectives* (proposed Narrative WQO Policy) under the new “Regionwide Policies” heading. The proposed policy will describe the process the Regional Water Board uses when narrative objectives are translated into numeric limits for use in permits, orders, or other Board actions as appropriate.
- Editorial revisions to the Schedules of Compliance section to be consistent with the *Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits*.

Other editorial (non-substantive) revisions, as presented below, will be made to both Chapters 3 and 4 to reflect revisions made as editorial amendments to previous chapters of the Basin Plan and to improve clarity and readability.

- Replacement of “Section” with “Chapter” as appropriate.
- Modification of Chapter 4 title from “Implementation Plans” to “Implementation Polices and Action Plans.”
- Removal of outdated or redundant information such as references to appendices no longer proposed for inclusion in the Basin Plan.
- Implementation of the chapter and section number system used in previous editorial amendments of the Basin Plan (Chapters 1 and 2).
- Revision of page numbers to remove “.00” from each page, resulting in the format “3-x” and “4-x.”

1.2 Staff Determination

Staff has determined through completion of a California Environmental Quality Act (CEQA) analysis that the adoption of the WQO Update Amendment will not result in significant environmental impacts or in additional economic costs to the public.

The proposed WQO Update Amendment serves to clarify and update the current contents of Sections 3 and 4 of the Basin Plan. Therefore, staff recommends that the Regional Water Board consider adoption of the proposed WQO Update Amendment as presented in this Staff Report.

2. Introduction

This Staff Report presents the necessary information and findings to support the *Proposed Amendment to the Water Quality Control Plan for the North Coast Region to Update Water Quality Objectives* (proposed WQO Update Amendment). The proposed WQO Update Amendment was developed by North Coast Regional Water Quality Control Board (Regional Water Board) staff to update the *Water Quality Control Plan for the North Coast Region* (Basin Plan) by revising the Water Quality Objectives and Implementation Plans sections of the Basin Plan to provide clear and transparent regulation. The primary goals of the proposed WQO Update Amendment are to add a groundwater toxicity objective and to clarify the process the Regional Water Board uses when translating narrative objectives into numeric limits in permits, orders, or other Board actions as appropriate. Other revisions to the Basin Plan, as described in this Staff Report, are necessary to meet these goals.

The proposed WQO Update Amendment language is appended to this Staff Report for the reader's convenience. Appendices A and B provide a strikethrough/underline version of the proposed revisions to the Water Quality Objectives and Implementation Plans portions of the Basin Plan (Chapters 3 and 4, respectively). Appendix C presents the "clean version" of the Water Quality Objections portion of the Basin Plan with the proposed revisions incorporated. This Staff Report provides the necessary information relative to the scope, need, and environmental impacts of the proposed WQO Update Amendment.

2.1 Overview of the North Coast Region

The North Coast Region is comprised of all basins, including Lower Klamath Lake and Lost River basins, which drain into the Pacific Ocean from the California-Oregon state line to the southerly boundary of the watershed of the Estero de San Antonio and Stemple Creek in Marin and Sonoma counties.

The North Coast Region (Region) is divided into two natural drainage basins, the Klamath River Basin and the North Coastal Basin. The Region includes all of Del Norte, Humboldt, Trinity, and Mendocino counties, approximately 80 percent of Siskiyou and Sonoma counties, and small portions of Modoc, Lake, Glenn, and Marin counties. The Region encompasses approximately 19,400 square miles, including 340 miles of scenic coastline, vast areas of remote wilderness, as well as urbanized and agricultural areas.

The Region had a population of 670,287 people in 2005. About 2 percent of the state's total population lives in this region, and 49 percent of the region's population lives in

incorporated cities. Between 2000 and 2005, the population grew by 26,287 people, a growth of 4 percent over the 5-year period.¹

Surface water and groundwater resources are used in a number of ways that support human and aquatic ecosystem uses (i.e., beneficial uses of water).

Many large and small communities, as well as individual landowners, depend on surface waterbodies for their municipal and/or domestic water supplies. The cities of Eureka, Fort Bragg, and Santa Rosa all rely largely on surface water supplies with intakes on the Mad, Noyo, and Russian rivers, respectively. Recreation on and around surface waters annually attracts millions of people from across the county and the globe to the Region. Surface waters also support fish and wildlife habitat, sport and commercial fishing, hydroelectric power generation, and many other beneficial uses.

Shallow and deeper groundwaters are extensively used for municipal and domestic supply, agricultural supply, and industrial service supply in the North Coast Region. The cities of Santa Rosa, Sebastopol, Rohnert Park, Ukiah, and Yreka rely at least in part on groundwater for their municipal supply.

Predicted population increases in the Region and anticipated erratic future precipitation trends due to climate change are likely to increase reliance on groundwater resources to support future water needs in the Region. Increased demand on groundwater supplies is already occurring in many areas of the Region. Protection of groundwater resources is also an important component in the protection of a number of beneficial uses associated with surface waters, such as providing base flow and cold freshwater habitat from inflow of cold groundwater to streams during warm summer months.

See Section 7.2 of this Staff Report for more information on the hydrologic units in the Region.

2.2 Function and Framework of the Basin Plan

The Porter-Cologne Water Quality Control Act (Porter-Cologne) established the regional water board system and charged the boards with the primary responsibility for protecting water quality in the state.² Porter-Cologne also required that each regional water board formulate and adopt basin plans for all areas within its region. The North Coast Regional Water Board's Basin Plan is designed to provide a definitive program of actions to preserve and enhance water quality and protect beneficial uses of waters of the state in the Region and forms the basis for the Regional Water Board's regulatory programs. The Basin Plan also must be consistent with state policies and plans. The Basin Plan, including periodic updates, has been approved by the State Water

¹ California Water Plan, 2009 Update, Department of Water Resources.

² Wat. Code § 13001.

Resources Control Board (State Water Board), the Office of Administrative Law (OAL), and the U.S. EPA as appropriate.³

Specifically, the Basin Plan 1) identifies beneficial uses for surface waters and groundwaters, 2) sets narrative and numeric water quality objectives that must be attained or maintained to protect beneficial uses, 3) includes implementation programs that include specific prohibitions, action plans, and policies to achieve water quality objectives, and 4) describes surveillance and monitoring activities. The Basin Plan also requires the following:

Controllable water quality factors shall conform to the water quality objectives contained herein. When other factors result in the degradation of water quality beyond the levels or limits established herein as water quality objectives, then controllable factors shall not cause further degradation of water quality. Controllable water quality factors are those actions, conditions, or circumstances resulting from man's activities that may influence the quality of the waters of the State and that may be reasonably controlled.

The Water Quality Objectives portion of the Basin Plan (Chapter 3) identifies water quality objectives that the Regional Water Board has adopted for protection of beneficial uses of water. These water quality objectives form the basis for establishing numeric and narrative effluent limits in Regional Water Board permits orders, or other Board actions. These water quality objectives are also used for setting limits in State Water Board-issued permits in the Region.

The Basin Plan establishes a general objective which applies to all waters in the region. The general objective incorporates state and federal antidegradation policies for maintaining existing high quality waters. The Basin Plan also establishes both specific numeric and narrative water quality objectives for ocean waters, inland surface waters, enclosed bays, estuaries, and groundwaters.

The antidegradation policies prohibit the degradation of the quality of water where the existing quality is better than that specified by the water quality objectives, unless otherwise allowed by the provisions of State Water Board *Statement of Policy with Respect to Maintaining High Quality Waters in California*. Further information regarding the antidegradation policies can be found in Section 6 of this Staff Report (Antidegradation Analysis).

³ U.S. EPA approval is required for surface water standard actions.

2.3 Background on the Proposed WQO Update Amendment

Periodic review of the Basin Plan is required by state and federal law in order to ensure that the Basin Plan remains effective regulation. As part of the review process (triennial review), the Regional Water Board identifies and ranks water quality-related issues that could potentially be resolved through an amendment to the Basin Plan.

Since 1988, the Regional Water Board has consistently ranked the development of a groundwater toxicity objective as a high priority during each triennial review process.

During the 2004 Triennial Review of the Basin Plan, the Regional Water Board included direction that a Basin Plan amendment be developed that would clearly articulate the process used by the Board in translating narrative water quality objectives into numeric limits for use in permits, orders, or other regulatory actions as appropriate. At this time, the Regional Water Board also directed staff to develop minor editorial (non-substantive) revisions to the existing water quality objectives for groundwater and surface water to update outdated references, etc.

As part of the 2007 Triennial Review, these issues were combined into one task to facilitate development of a comprehensive proposal and to aid in outreach and solicitation of public comment. Staff determined that the multitude of actions required to complete this task would be most appropriately divided into two distinct Basin Plan amendments. The actions identified in this Staff Report represent the first phase of this work. This first phase focuses on revisions to water quality objectives and the addition of new language that clarifies how narrative objectives are translated into numeric values. The second phase will focus on revisions to Basin Plan Chapter 4 - Implementation Plans to include a new groundwater protection policy and to update the implementation program for the discharge of waste to land.

The 2011 Triennial Review List, adopted on September 29, 2011, identifies the two phases of this work as task 3 of thirty-one tasks. Staff will soon begin development on the second phase of this task. Staff is planning on conducting a California Environmental Quality Act (CEQA) scoping meeting in mid-2012 to solicit early public comment on the development of the implementation phase of this work.

2.4 Goals of the Proposed WQO Update Amendment

As described above, staff determined that the most effective way to meet these goals is the development and presentation of the necessary revisions to the Basin Plan in two phases. This proposed WQO Update Amendment represents the first phase.

The primary goals of the proposed WQO Update Amendment are to 1) develop a groundwater toxicity objective; 2) develop a general chemical constituents objective for municipal and domestic water supplies to replace Table 3-2; and 3) clarify the process the Regional Water Board uses when translating narrative objectives into numeric limits in permits, orders, or other Board actions.

The adoption of a specific numeric toxicity objective for groundwaters would be virtually impossible due to the vast number of constituents with toxic properties and the synergistic effects of these compounds. Instead, staff developed a proposed narrative toxicity objective for groundwaters based on the existing narrative toxicity objective for surface waters in the Region. The proposed groundwater toxicity objective is virtually identical to the objective that has been in effect in the Central Valley Region for many years.

A new general chemical constituents objective for municipal and domestic water supplies is also proposed. This objective was developed to replace the outdated numeric values contained in the existing Table 3-2, *Inorganic, Organic, and Fluoride Concentrations Not to be Exceeded in Domestic or Municipal Supply*, and to provide current references to applicable Title 22 sections.

For many water quality objectives identified in the Basin Plan, numeric limits are not specified. Instead, these objectives are specified using narrative language that describes a condition that water quality must meet. Currently, the Basin Plan does not contain a systematic explanation of the process used by the Regional Water Board to translate narrative objectives into numeric limits for use in permits, orders, or other Board actions. The absence of a policy that clearly articulates this process has been identified as a source of confusion and controversy for many years.

2.5 Proposed WQO Update Amendment Revisions

This section provides a summary of the revisions included as part of the proposed WQO Update Amendment. These proposed revisions include both non-substantive (editorial) and substantive revisions to the affected chapters.

Proposed revisions to Chapter 3 - Water Quality Objectives are presented below:

- Addition of a new narrative toxicity objective for groundwater.
- Deletion of Table 3-2, *Inorganic, Organic, and Fluoride Concentrations Not to be Exceeded in Domestic or Municipal Supply*.
- Addition of a new general chemical constituents objective for municipal and domestic water supplies to replace Table 3-2.
- Revision of existing numeric and narrative objectives to update language, improve clarity, and reference the proposed general chemical constituents objective for municipal and domestic water supplies in place of Table 3-2 as appropriate.
- Minor revisions to Table 3-1, *Specific Water Quality Objectives for North Coast Region* and Table 3-1a. Includes reformatting of information contained in Table 3-1, relocating information contained in footnote 5 to a new Table 3-1b (*Specific Objectives for Temperature in the Upper Trinity River*), and addition of a title to Table 3-1a (*Site-Specific Objectives (SSOs) for Dissolved Oxygen (DO) in the*

Mainstem Klamath River). Tables relocated to end of chapter to improve readability.

- Revision of the Compliance with Water Quality Objectives section to include a discussion on compliance with water quality objectives for non-NPDES programs. Includes a discussion relative to the use of the proposed Narrative WQO Policy.
- Addition of references to the National Toxics Rule (NTR), California Toxics Rule (CTR), and the State Water Board *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries* (SIP) to inform the reader of their applicability to surface waters in the North Coast Region.

Proposed revisions to Chapter 4 - Implementation Plans are presented below:

- Addition of a new section heading, “Regionwide Policies” to be inserted at the beginning of the chapter just after the introductory language.
- Addition of a new *Policy for the Application of Narrative Water Quality Objectives* (proposed Narrative WQO Policy) under the new “Regionwide Policies” heading. The proposed policy will describe the process the Regional Water Board uses when narrative objectives are translated into numeric limits for use in permits, orders, or other Board actions as appropriate.
- Editorial revisions to the Schedules of Compliance section consistent with the *Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits*.

Other editorial (non-substantive) revisions, as presented below, will be made to both Chapters 3 and 4. These changes reflect revisions made through previous editorial amendments to the Basin Plan and improve clarity and readability.

- Replacement of “Section” with “Chapter” as appropriate.
- Modification of Chapter 4 title from “Implementation Plans” to “Implementation Polices and Action Plans.”
- Removal of outdated or redundant information such as reference to appendices no longer proposed for inclusion in the Basin Plan.
- Implementation of the chapter and section number system used in previous editorial amendments of the Basin Plan (Chapters 1 and 2).
- Revision of page numbers to remove “.00” from each page, resulting in the format “3-x” and “4-x.”

2.6 Public Participation

A CEQA scoping meeting introducing the goals of the proposed WQO Update Amendment was held in Santa Rosa, California on July 8, 2010. The purpose of the meeting was to present the goals of the project and receive input from the public on the possible environmental impacts of the project. In August 2011, a notice was sent to interested stakeholders (subscribers of the Basin Plan amendment email list)

announcing the posting of the public participation plan on the Regional Water Board's website.

Staff conducted public workshops in Santa Rosa and Weaverville (November 3 and 8, 2011, respectively) to update the Regional Water Board and the public on the status of the proposed WQO Update Amendment. An additional public workshop is scheduled for the Regional Water Board's March 15, 2012 meeting.

The proposed WQO Update amendment and the supporting Staff Report will be available for public review and comment for at least 45-days prior to the Regional Water Board hearing during which the Board will consider the amendment for adoption. Following the close of the written public comment period, appropriate revisions will be made to the proposed Basin Plan language. A document presenting written public comments and staff responses will be prepared prior to the adoption hearing. This document and the proposed Basin Plan amendment language will tentatively be presented to the Regional Water Board for their consideration at a public hearing in mid-2012.

3. Proposed Revisions to Basin Plan Chapter 3 - Water Quality Objectives

This section of the Staff Report presents the rationale for the recommended revisions to Chapter 3, the Water Quality Objectives portion of the Basin Plan. The proposed revisions to this chapter are included with this Staff Report as Appendices A and C (strikethrough/underline copy and clean copy, respectively). In some case, excerpts from the proposed Basin Plan amendment language are included in the Staff Report to provide clarity.

Major portions of the Basin Plan are currently identified as “sections” within the table of contents and the text of the Basin Plan. No numbering system is currently applied to the subsections contained in these “sections.” As part of this amendment, staff proposes to replace the term “section,” where appropriate, with “chapter” to indicate clearly the overall framework of the Basin Plan. Sections and subsections will be used as appropriate, and a numbering system will be introduced to identify individual parts within each chapter for the user’s convenience. This is consistent with formatting revisions made to Chapters 1 and 2 of the Basin Plan during earlier editorial amendments.

The current page numbering system used in the Basin Plan (e.g., “3-9.00” and “3-10.00.”) was implemented to accommodate updating of hard copy Basin Plans on a page-by-page basis before the routine utilization of computer technology. The use of this expanded numbering system allowed a new page to be easily inserted between existing pages (e.g., “3-9.01”) without having to repaginate the remaining portion of the Basin Plan. This expanded numbering system has not been used in the North Coast Region’s Basin Plan for several revisions. As part of this amendment, staff proposes to replace this numbering scheme with a “3-x” format.

3.1 Revisions to “Introduction” Section

Various editorial changes are proposed for the introductory section of this chapter including:

- Addition of explanatory language generally describing narrative and numeric water quality objectives.
- Addition of a footnote clarifying that the terms “designated use” and “water quality criteria” are based in federal law.
- Addition of a footnote clarifying that “beneficial use” and “water quality objectives” are terms derived from state law.
- Relocation of the existing text describing controllable factors to its own section. In addition, the phrase “human caused” will be substituted for “man caused.”
- Deletion of outdated or redundant text such as the reference to expired waivers, the description of classes of water (which is presented in Chapter 2 – Beneficial Uses) and the superseding of water quality objectives contained in earlier editions of the Basin Plan.

- Removal of references to appendices no longer proposed for inclusion in the Basin Plan.
- Other minor editorial changes, such as capitalization, punctuation, grammar, and other minor revisions to improve clarity.

3.2 Revision to “General Water Quality Objectives” Section

The title of the “General Objective” section will be changed to “General Water Quality Objectives” for naming consistency and to acknowledge that more than one general water quality objective will be located within this section. Reference to the “General Water Quality Objectives” section is recommended for inclusion in other sections of the Basin Plan (e.g., Water Quality Objectives for Groundwaters), as appropriate, to inform the user of the applicability of the general water quality objectives. This will be addressed in the discussion presented below for each of the subject objectives.

3.2.1 Revisions to the “Antidegradation Policies” Section

Existing language from the “General Objectives” section will be placed into a subordinate section of the “General Water Quality Objectives” section and will be titled “Antidegradation Policies.” The inclusion of the commonly used phrase “antidegradation” in the section heading will make it easy for the user to locate this section in either hard copy or electronic format.

Minor editorial changes are recommended to improve the clarity and readability of this section. It is also recommended that the existing language referring readers to the Antidegradation Policies as Appendices 6 and 6B of the Basin Plan be deleted. Plans and polices will no longer be included as appendices to the Basin Plan. Instead, a reference will be added directing the reader to the State Water Board website. This approach will prevent the reader from inadvertently relying on outdated information in the Basin Plan when the State Water Board revises a state plan or policy. Advances in technology make inclusion of these documents as appendices to the Basin Plan unnecessary as they are easily accessed via the internet.

3.2.2 Addition of a Proposed General Water Quality Objective for “Minimum Chemical Constituents Levels for Municipal and Domestic Water Supplies”

A new water quality objective, applicable to both surface waters and groundwaters, is proposed for inclusion under the “General Water Quality Objectives” section. The proposed objective language is presented below in an underscore format for the reader’s convenience. This objective is also referred to as the “general chemical constituents objective for municipal and domestic water supplies” and the “general chemical constituents objective” throughout this document.

Minimum Chemical Constituents Levels for Municipal and Domestic Water Supplies

At a minimum, waters with the municipal and domestic supply (MUN) beneficial use shall not contain concentrations of chemical constituents in excess of the following maximum contaminant level (MCL) and secondary maximum contaminant level (SMCL) provisions specified in Title 22 of the California Code of Regulations:

- Table 64431-A, Maximum Contaminant Levels - Inorganic Chemicals (§ 64431)
- Table 64444-A, Maximum Contaminant Levels - Organic Chemicals (§ 64444)
- Table 64449-A, Secondary Maximum Contaminant Levels - "Consumer Acceptance Contaminant Levels" (§ 64449)
- Table 64449-B, Secondary Maximum Contaminant Levels - "Consumer Acceptance Contaminant Level Ranges" (§ 64449)
- Table 64442, Radionuclide Maximum Containment Levels (MCLs) and Detection Levels for Purposes of Reporting (DLRs) (§ 64442)
- Table 64443, Radionuclide Maximum Contaminant Levels (MCLs) and Detection Levels for Purposes of Reporting (DLRs) (§ 64443)

These provisions are incorporated by reference into this Basin Plan. This incorporation by reference is prospective, including future changes to the incorporated provisions as the changes take effect.

This proposed general objective was developed to replace the outdated numeric values contained in the existing Table 3-2, *Inorganic, Organic, and Fluoride Concentrations Not to be Exceeded in Domestic or Municipal Supply*. The new objective requires that the minimum numeric levels (e.g., MCLs and SMCLs) contained in the most recent California Code of Regulations Title 22 criteria apply to all waters in the North Coast Region with the municipal and domestic water supply beneficial use. The proposed language also references the applicable Title 22 tables and sections for each of the constituents included in Table 3-2, with the exception of lead. Including this objective under the "General Water Quality Objectives" heading (which is applicable to both surface waters and groundwaters) provides clarity for the reader as the Title 22 drinking water references for the Table 3-2 constituents are proposed to be located in one prominent location in the Basin Plan.

Referencing the applicable sections of Title 22 reduces the potential for having outdated information, such as MCL levels that have been superseded by changes in regulation, presented in the Basin Plan. The inclusion of the language regarding prospective changes to Title 22 is used in a number of other Basin Plans, such as the Los Angeles

Region (Region 4), the Central Valley Region (Region 5), and the Lahontan Region (Region 6).

The new objective provides a single, concise location for those interested in the applicability of Title 22 requirements to their activities. To provide clarity, staff recommends that a reference to this new objective be included in the existing surface water objectives for chemical constituents, pesticides, and radioactivity, and the existing groundwater objectives for chemical constituents and radioactivity. Existing chemical constituents and pesticides objectives currently reference Title 22 and Table 3-2. Existing radioactivity objectives currently reference Title 22. The addition of this language will be presented below for each of the affected objectives.

Lead has been listed in Table 3-2 since the 1975 version of the Basin Plan. Title 22 does not currently contain an MCL for lead. Appropriate limits for lead will be determined through application of the *Policy for the Application of Narrative Water Quality Objectives* (Narrative WQO Policy).

Fluoride MCLs currently listed in Table 3-2 are dependent on the average annual maximum daily air temperature. Title 22 no longer specifies temperature dependent MCLs for fluoride. Rather, a single MCL value for fluoride is contained in the Title 22 section pertaining to Inorganic Chemical MCLs.

3.3 Revisions to “Objectives for Ocean Waters” Section

Staff recommends that the “Objectives for Ocean Waters” heading be changed to “Water Quality Objectives for Ocean Waters” for consistency.

In addition, reference to the *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California* (Thermal Plan) in the appendix section of the Basin Plan will be revised to direct the reader to the State Water Board’s website.

3.4 Revisions to “Objectives for Inland Surface Waters, Enclosed Bays, and Estuaries” Section

The introductory language in this section will be revised to include a reference to the State Water Board *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries* (SIP) to inform the reader that this policy is applicable to waters in the North Coast Region. This revision is consistent with the information on applicable state plans and policies presented in the section on ocean waters. References to the National Toxics Rule (NTR) and the California Toxics Rule (CTR) will be added to inform the reader that these regulations are applicable to waters in the North Coast Region. References to the other tables containing site-specific objectives (i.e., Tables 3-1a and 3-1b) will be added after the reference to Table 3-1. Other minor editorial revisions, such as revision to the heading for consistency with other headings, are also proposed to improve readability.

The Water Quality Objectives chapter contains seventeen water quality objectives that apply to the protection of surface waters in the Region. Nine of these objectives require minor revisions for the reasons detailed below. Additionally, the objectives will be rearranged and presented in alphabetical order for the user's convenience.

3.4.1 “Bacteria” Objective

No revisions to the bacteria objective are proposed as part of this amendment. Significant substantive revisions, which will be addressed at a future date, are required to appropriately update this objective. These revisions will most likely be postponed until an objective with statewide applicability is adopted by the State Water Board as part of their ongoing effort to update freshwater bacteria standards.

The issue of updating the bacteria objective for surface waters has been included on the Triennial Review list since 2001 and its importance was reaffirmed on the 2011 Triennial Review list. To complete development of the proposed pathogen Total Maximum Daily Load (TMDL) for the Russian River by the scheduled date of 2014, the Regional Water Board may need to address this issue independent of the state's action.

3.4.2 “Biostimulatory Substances” Objective

No revisions proposed to the existing language.

3.4.3 Revisions to “Chemical Constituents” Objective

One of the fundamental principles of state and federal water quality law is the need to protect all existing beneficial uses of water.⁴ To clarify this point, Regional Water Board staff proposes to remove references to protection of waters specifically “designated” as municipal and domestic supply (MUN) and agricultural supply (AGR) from the chemical constituents objective. A reference to compliance with the new general chemical constituents objective for municipal and domestic water supplies will be added to reaffirm the importance of drinking water supply protection. Protection of agricultural uses will be adequately addressed by the requirement that all beneficial uses of water are protected. The inclusion of a reference to the new general chemical constituents objective will allow deletion of Title 22 and Table 3-2 references from this objective. In addition, updated Title 22 section and table information applicable to this objective will be included in the new general chemical constituents objective.

Proposed revisions to the chemical constituents objective are presented below:

⁴ 40 C.F.R. § 131.10(j).

At a minimum, waters with the municipal and domestic supply (MUN) beneficial use shall comply with the minimum chemical constituents levels for municipal and domestic water supplies objective.

Waters shall not contain chemical constituents at concentrations that cause nuisance or adversely affect beneficial uses.

Table 3-1 contains waterbody specific numeric water quality objectives for certain chemical constituents.

3.4.4 “Color” Objective

No revisions proposed to the existing language.

3.4.5 Revisions to “Dissolved Oxygen” Objective

Regional Water Board staff recommends an editorial revision to the existing dissolved oxygen objective. The proposed revision includes adding a reference to Table 3-1a, which was recently amended into the Basin Plan as part of the site-specific dissolved oxygen objective for the mainstem Klamath River.

Proposed revisions to the dissolved oxygen objective are presented below:

Dissolved oxygen concentrations shall conform to the limits listed in Table 3-1 and 3-1a. For waters not listed in Table 3-1 or 3-1a, and where dissolved oxygen objectives are not prescribed, the dissolved oxygen concentrations shall not be reduced below the following minimum levels at any time:

- Waters designated WARM, MAR, or SAL5.0 mg/L
 - Waters designated COLD6.0 mg/L
 - Waters designated SPWN7.0 mg/L
 - Waters designated SPWN during critical spawning and egg incubation periods9.0 mg/L
-

3.4.6 “Floating Material” Objective

No revisions proposed to the existing language.

3.4.7 “Oil and Grease” Objective

No revisions proposed to the existing language.

3.4.8 Revisions to “Pesticides” Objective

Language referring to protection of waters “designated” as municipal and domestic supply (MUN) will be deleted from this objective as protection of all existing beneficial uses of water is required by law, whether or not the use is “designated” in the Basin Plan. Instead, language will be added that clarifies that if the use exists it will be protected.

The references to Title 22 and Table 3-2 will also be deleted from this objective and replaced with a reference to the new general chemical constituents objective for municipal and domestic water supplies. In addition, updated Title 22 section and table information applicable to this objective will be included in the new general chemical constituents objective.

Proposed revisions to the pesticides objective are presented below:

At a minimum, waters with the municipal and domestic supply (MUN) beneficial use shall comply with the minimum chemical constituents levels for municipal and domestic water supplies objective.

No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses. There shall be no bioaccumulation of pesticide concentrations in bottom sediments or aquatic life.

3.4.9 Revisions to “pH” Objective

The following minor revisions are proposed for the pH objective.

The pH shall conform to those limits listed in Table 3-1. For waters not listed in Table 3-1 and where pH objectives are not prescribed, the pH shall not be depressed below 6.5 nor raised above 8.5. Changes in normal ambient pH levels shall not exceed 0.2 units in waters with marine habitat (MAR) or inland saline water habitat (SAL) beneficial uses nor 0.5 units within the range specified above in fresh waters with cold freshwater habitat (COLD) or warm freshwater habitat (WARM) beneficial uses.

These revisions are proposed to improve readability by including the name of the cited beneficial uses (e.g., inland saline water habitat) rather than relying on the abbreviation (SAL). This clarification will be applied throughout the proposed amendment as appropriate.

3.4.10 Revision to “Radioactivity” Objective

Language referring to protection of waters designated as municipal and domestic supply (MUN) will be removed from this objective, as protection of all beneficial uses is required by law. The reference to Title 22 and the table with maximum contaminant levels in pCi/L will also be deleted from this objective and replaced with a reference to the proposed general chemical constituents objective for municipal and domestic water supplies. In addition, updated Title 22 section and table information applicable to this objective will be included in the new general chemical constituents objective.

The following revisions are proposed for the radioactivity objective. The strikethrough of the existing table is not included for readability.

At a minimum, waters with the municipal and domestic supply (MUN) beneficial use shall comply with the minimum chemical constituents levels for municipal and domestic water supplies objective.

Radionuclides shall not be present in concentrations which are deleterious to human, plant, animal, or aquatic life, nor which result in the accumulation of radionuclides in the food web to an extent which presents a hazard to human, plant, animal, or indigenous aquatic life.

3.4.11 “Sediment” Objective

No revisions proposed to the existing language.

3.4.12 “Settable Material” Objective

No revisions proposed to the existing language.

3.4.13 “Suspended Sediment” Objective

No revisions proposed to the existing language.

3.4.14 Revisions to “Tastes and Odors” Objective

References to numeric water quality objectives established by Department of Health Services and the U.S. EPA, as well as the reference to waste discharge requirements and other orders, will be removed from this objective to provide a more concise definition.

The following revision is proposed for the taste and odor objective.

Waters shall not contain taste- or odor-producing substances in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, or that cause nuisance or adversely affect beneficial uses.

3.4.15 Revisions to “Temperature” Objective

Minor revisions to the existing temperature objective are proposed to improve readability and correct outdated information. The reference to the State Water Board’s *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays of California* as an appendix to the Basin Plan will be deleted. Instead, the reader will be referred to the State Board website as state plans and policies will no longer be included as appendices to the Basin Plan. A reference to the existing site-specific temperature objectives for the Upper Trinity River is also proposed for inclusion in the objective to provide clarity to the user.

The following revisions are proposed for the temperature objective.

Temperature objectives for interstate waters associated with cold freshwater habitat (COLD), warm freshwater habitat (WARM), enclosed bays, and estuaries are as specified in the State Water Board *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays of California* (Thermal Plan) including any revisions thereto. The Thermal Plan is available at the State Water Board website.

In addition, the following temperature objectives apply to surface waters:

The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional

Water Board that such alteration in temperature does not adversely affect beneficial uses.

At no time or place shall the temperature of any waters associated with cold freshwater habitat (COLD) be increased by more than 5°F above natural receiving water temperature.

At no time or place shall the temperature of intrastate waters associated with warm freshwater habitat (WARM) be increased more than 5°F above natural receiving water temperature.

Site-specific objectives for temperature in the Upper Trinity River are listed in Table 3-1b.

3.4.16 Revisions to “Toxicity” Objective

The existing toxicity objective for surface waters will be refined to clarify that the objective applies regardless of whether the toxicity is caused by a single substance or the interactive effect of multiple substances. This language is identical to the language used in the Central Valley Region Basin Plan (Region 5).

In addition, the reference to a specific edition of *Standard Methods for the Examination of Water and Wastewater* will be changed to “latest edition.” This revision will ensure that the most current version provides the regulatory framework, not an outdated version as can occur if a specific edition is referenced without qualification.

The following revisions are proposed for the toxicity objective.

All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. This objective applies regardless of whether the toxicity is caused by a single substance or the interactive effect of multiple substances. Compliance with this objective shall be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Water Board.

The survival of aquatic life in surface waters subjected to a waste discharge, or other controllable water quality factors, shall not be less than that for the same waterbody in areas unaffected by the waste discharge, or when necessary for other control water that is consistent with the requirements for "experimental water" as described in *Standard Methods for the Examination of Water and Wastewater*, latest edition (American Public Health Association, et al.). As a minimum, compliance with this objective shall be evaluated with a 96-hour bioassay.

In addition, effluent limits based upon acute bioassays of effluents will be prescribed. Where appropriate, additional numeric receiving water objectives for specific toxicants will be established. As sufficient data become available, source control of toxic substances may be required.

3.4.17 “Turbidity” Objective

No revisions proposed to the existing language.

3.5 Revisions to Tables 3-1 and 3-1a - “Specific Water Quality Objectives”

Table 3-1 footnote 5 currently contains the site-specific temperature objectives for the Upper Trinity River. The information presented in this footnote will be reformatted as a stand-alone table (Table 3-1b), similar to the format used for the site-specific Klamath River dissolved oxygen (DO) objective. This change will require renumbering of the remaining Table 3-1 footnotes. In addition, the “50% lower limit” DO value presented for the South Fork Eel River will be corrected to read “10.0” (from “0.0”). The “1” was inadvertently omitted during a previous reformatting of the Basin Plan.

The title, *Site-Specific Objectives (SSOs) for Dissolved Oxygen in the Mainstem Klamath River*, will be added to Table 3-1a for clarity and to facilitate placement into the Table of Contents.

The site-specific tables (Tables 3-1, 3-1a, and 3-1b) will be relocated to the end of the chapter to improve readability.

3.6 Revisions to Table 3-2 - “Inorganic, Organic, and Fluoride Concentrations Not to be Exceeded in Domestic or Municipal Supply”

Fifty-one numeric objectives developed to protect drinking water supplies are identified in Table 3-2 - *Inorganic, Organic and Fluoride Concentrations Not to Be Exceeded in Domestic or Municipal Water Supply*. The numeric objectives in Table 3-2 are based upon the Maximum Contaminant Levels (MCLs) that were specified in Title 22 of the California Code of Regulations at the time Table 3-2 was adopted or last revised. MCLs are established for drinking water protection and are not necessarily protective of aquatic life or other beneficial uses. Updates that have been made to these regulations, including the inclusion of additional constituents and changes to the MCLs, have not been explicitly incorporated into the Basin Plan. In addition, only 27 of the 126 priority pollutants included in the National Toxics Rule (NTR) and California Toxics Rule (CTR) are included in this table of chemical constituents which affect drinking water.

The presence of the outdated and incomplete information contained in Table 3-2, *Inorganic, Organic, and Fluoride Concentrations Not to be Exceeded in Domestic or Municipal Supply*, of the Basin Plan results in confusion and inefficiencies affecting staff and the public's time. To alleviate this problem, staff recommends that Table 3-2 and all references to it be deleted from the Basin Plan. In its place, staff recommends that the Board consider adoption of a new general chemical constituents objective for municipal and domestic water supplies.

Staff recommends that Table 3-2 and all references to it be deleted from the Basin Plan for the following reasons:

- The values listed in Table 3-2 were first derived during the mid-1970s and are based on the Maximum Contaminant Level (MCL) values listed in California Code of Regulations (CCR) Title 22 at the time. Staff conducted a review of the MCLs in Table 3-2 and determined that the majority of the values presented in Table 3-2 are no longer appropriate as they do not accurately reflect current Title 22 regulations.
- Maintaining a table containing values consistent with the CCR would require continual updating of the Basin Plan. Additional and new chemical constituents and their MCLs have been added to the CCR since the adoption of Table 3-2. The chemical constituents listed in the CCR will continue to expand. Established MCL values are always subject to future revision. The new objective refers to Title 22 changes prospectively; thus, there is no opportunity for it to become outdated.
- The process by which the Regional Water Board staff currently translates narrative objectives into numeric limits for incorporation into permits, orders, or other Board actions is not clearly apparent to the regulated community and other stakeholders as the values set in permits, orders, etc. may not coincide with the values listed in Table 3-2. Staff is currently using the same basic process that is outlined in the proposed Narrative WQO Policy to make these determinations for

the Board's consideration. Thus, the proposed Narrative WQO Policy is being added to provide transparency and articulate the regulatory process that staff is currently using when drafting permits, orders, etc.

- Presented with its current title, Table 3-2, and the regulation of the chemical constituents contained in the table, appears to apply only to the protection of drinking water supplies and not to provide protection for all beneficial uses of water. To compensate for this point of confusion, staff has relied on Table 3-2, footnote number 2, to establish effluent limits for use in permits, orders, or other regulatory actions that are protective of all existing beneficial uses of water. Footnote 2 provides, in part, that more stringent objectives may apply. This has led to numerous disagreements over what constitutes a "more stringent" objective for a particular application, and a tremendous amount of staff and discharger's time has been spent resolving these disagreements. The lack of a clear and transparent policy that articulates the process staff uses to determine the appropriate numeric level has been one of the biggest causes for time delays in preparing permits, cleanup orders, etc. in the North Coast Region.
- Lead has been listed in Table 3-2 since the 1975 version of the Basin Plan. Title 22 does not currently contain an MCL for lead. Appropriate limits for lead will be determined through application of the Narrative WQO Policy.
- Fluoride MCLs currently listed in Table 3-2 are dependent on the average annual maximum daily air temperature. Title 22 no longer specifies temperature dependent MCLs for fluoride. Rather, a single MCL value for fluoride is contained in the Title 22 section pertaining to Inorganic Chemical MCLs.
- Table 3-2 currently contains a list of temperature dependent optimal fluoride levels. These levels apply to public water systems that are fluoridating and not to the protection of surface waters and groundwaters in the region. Therefore, these values and any references to the Title 22 section pertaining to these values are not needed in the Basin Plan.

See Section 6 (Antidegradation Analysis) of this Staff Report for more information on regulatory effects from removal of Table 3-2.

3.7 Revision to "Water Quality Objectives for Groundwaters" Section

Staff proposes the addition of introductory language to this section of the Basin Plan. The language is being added for clarity.

In addition to the general water quality objectives and the site-specific objectives contained in Table 3-1, the following objectives shall apply to groundwaters of the North Coast Region. Water quality objectives are presented in alphabetical order.

The heading "General Objectives" will be deleted from this section to provide consistency with other sections of the Basin Plan.

The Basin Plan currently contains four water quality objectives that apply to the protection of groundwaters in the North Coast Region. These objectives require minor revisions for the reasons explained below. Additionally, the objectives will be rearranged into alphabetical order for the reader's convenience.

3.7.1 “Bacteria” Objective

No revisions to the bacteria objective are proposed as part of this amendment. Significant substantive revisions, which will be addressed at a future date, are required to appropriately update this objective.

3.7.2 Revisions to “Chemical Constituents” Objective

The objective for chemical constituents could be interpreted to apply only to groundwaters used for municipal and domestic supply (MUN) and agricultural supply (AGR). A change is proposed to clarify that all existing beneficial uses of groundwaters are to be protected as required by law. Regional Water Board staff proposes to remove references to protection of waters used for only municipal and domestic supply (MUN) and agricultural supply (AGR) from this objective. A reference to compliance with the new general chemical constituents objective for municipal and domestic water supplies will be added to reaffirm the importance of drinking water supply protection. Protection of agricultural uses will be adequately addressed by the requirement that all beneficial uses of water are protected. The inclusion of a reference to the new general chemical constituents objective will allow deletion of Title 22 and Table 3-2 references from this objective. In addition, updated Title 22 section and table information applicable to this objective will be included in the new general chemical constituents objective.

The following revisions are proposed for the groundwater chemical constituents objective.

At a minimum, waters with the municipal and domestic supply (MUN) beneficial use shall comply with the minimum chemical constituents levels for municipal and domestic water supplies objective.

Groundwaters shall not contain chemical constituents at concentrations that adversely affect ~~Numerical~~ beneficial uses. Numeric objectives for certain chemical constituents for individual groundwaters are contained in Table 3-1.

3.7.3 Revisions to “Radioactivity” Objective

The objective for radioactivity is written in such a manner as to imply that it is only applicable to groundwaters used for municipal and domestic supply (MUN). Language

referring to protection of waters used for municipal and domestic supply (MUN) will be removed from this objective, as protection of all beneficial uses is required by law. The reference to Title 22 will also be deleted from this objective and replaced with a reference to the proposed general chemical constituents objective for municipal and domestic water supplies. In addition, updated Title 22 section and table information applicable to this objective will be included in the new general chemical constituents objective.

The following revisions are proposed for the groundwater radioactivity objective.

At a minimum, waters with the municipal and domestic supply (MUN) beneficial use shall comply with the minimum chemical constituents levels for municipal and domestic water supplies objective.

Groundwaters shall not contain radionuclides at concentrations that adversely affect beneficial uses.

3.7.4 Revisions to “Tastes and Odors” Objective

Staff proposes to remove the language stating that State Department of Health Services and U.S. EPA numeric objectives are incorporated into waste discharge requirements and cleanup and abatement orders. Regional Water Board staff will use the Narrative WQO Policy when narrative objectives are translated into numeric levels for use in permits, orders, or other regulatory actions as appropriate.

The following revisions are proposed for the groundwater taste and odor objective.

Groundwaters shall not contain taste- or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses.

3.7.5 Addition of a Groundwater “Toxicity” Objective

An important goal of this amendment is the addition of a narrative toxicity objective for groundwaters to the North Coast Region Basin Plan. A groundwater toxicity objective will facilitate the protection of groundwater as a source of drinking water and stream replenishment in the Region.

The proposed toxicity objective is nearly identical to the one in effect in the Central Valley Region. The completion of a water quality standards analysis⁵ is required prior to adoption of the proposed objective. This analysis can be found in Section 7 of this Staff Report.

The proposed narrative toxicity objective for groundwaters would provide that all waters be maintained free of toxic substances in concentrations that may produce detrimental physiological responses in human, plant, animal, or aquatic life associated with the beneficial uses. This objective would apply regardless of whether the toxicity is caused by a single substance or the interactive effect of multiple substances. This objective will recognize that background levels of some toxic substances, such as the naturally occurring inorganic constituent arsenic, may be found in groundwaters. Toxic substances that are present in groundwater at naturally occurring background levels are not considered pollutants that require cleanup under the Regional Water Boards authority. However, if the groundwater aquifer was considered a source of drinking water, the California Department of Public Health would require treatment.

The proposed groundwater toxicity objective is presented below:

⁵ Wat. Code § 13241.

Groundwaters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, humans or aquatic life associated with the beneficial use(s) or that adversely impact one or more beneficial uses. This objective applies regardless of whether the toxicity is caused by a single substance or the interactive effect of multiple substances.

The State Water Board *Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304*⁶ directs the regional water boards to ensure that the cleanup of wastes discharged to water is conducted “in a manner that promotes attainment of either background water quality, or the best water quality which is reasonable and protective of the beneficial uses,” and that “any alternative cleanup levels less stringent than background shall not unreasonably affect present and anticipated beneficial use of such water.”

In the absence of a toxicity objective for groundwater, Regional Water Board staff must rely on alternative justifications and authority for establishing cleanup levels and permit limits to address toxic constituents of concern. These alternative justifications include the following:

- State and federal antidegradation provisions (Basin Plan General Water Quality Objective).
- Prohibition of nuisance conditions contained in California Water Code Section 13304.
- Existing water quality objectives for groundwater including those for chemical constituents and taste and odor.
- *Sources of Drinking Water Policy*.⁷
- *Policies and Procedures for Investigation and Cleanup of Discharges Under Water Code Section 13304*.⁸

Adopting a specific groundwater toxicity objective will provide a more effective and sound regulatory standard to address the cleanup of toxic substances in groundwaters. Several other regional boards have adopted a groundwater toxicity objective to provide for the effective regulation and cleanup of an ever-changing and expanding universe of toxic or chemical constituents in products and waste materials that threaten and adversely impact waters of the state.

To carry out the requirements of Clean Water Act Section 303(c)(2)(B) of the, when a state adopts narrative objectives for toxic pollutants the method by which the state

⁶ State Water Board Resolution 92-49.

⁷ State Water Board Resolution 88-63.

⁸ State Water Board Resolution 92-49.

intends to regulate point source discharges of toxic pollutants on water quality limited segments based on such narrative criteria must be identified. Such information may be included as part of the state's water quality standards or may be included in documents generated by the state in response to water quality planning and management regulations.⁹

The proposed Narrative WQO Policy satisfies the above requirement by describing the process (i.e., identifying a “translator procedure”) by which the Regional Water Board will determine limits and establish these limits for use in permits, orders and other Board actions as appropriate.

3.8 Revisions to “Compliance with Water Quality Objectives” Section

Staff proposes revisions to the Compliance with Water Quality Objectives section of the Water Quality Objectives chapter of the Basin Plan. Revisions will be made to ensure the section is consistent with the State Water Board's *Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits*,¹⁰ which was adopted in 2008. Upon adoption, the State Water Board's *Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits* superseded the *Compliance Schedule Policy* contained in the Basin Plan.

The section will be expanded to reference the proposed *Policy for the Application of Narrative Water Quality Objectives* as the process the Regional Water Board uses when narrative objectives are translated into numeric levels for use in permits, orders, or other Board actions as appropriate.

In addition to the discussion on National Pollutant Discharge Elimination Systems (NPDES), language will be added to provide information relative to how the Board will evaluate compliance with objectives for other Board programs (e.g., cleanups).

⁹ 40 C.F.R. part 35.

¹⁰ State Water Board Resolution 2008-0025.

4. Proposed Revisions to Basin Plan Chapter 4 - Implementation Plans

This section of the Staff Report presents a discussion on the proposed revisions to the Implementation Plans chapter proposed as part of this Basin Plan amendment. The following information is provided to inform the reader on the scope and rationale for the recommended revisions. The proposed revisions to the Implementation Plans chapter are included with this Staff Report as Appendix B (strikethrough/underline).

Both the 2007 and 2011 Triennial Reviews of the Basin Plan identified numerous issues relative to the Implementation Plans chapter that warranted staff investigation. Staff initiated a Basin Plan amendment in 2010 that addressed two primary issues. First, the need to create a policy that articulates the process the Regional Water Board uses to translate narrative water quality objectives into numeric limits or levels, and second, the need to develop a comprehensive groundwater protection policy to address the discharge of waste to land.

Due to the complexity of the issues associated with this task (and the existing structure of the Basin Plan), staff has adopted a two-phased approach to address these issues. This first phase will focus on the effort necessary to complete the revisions to water quality objectives contained in the Water Quality Objectives chapter of the Basin Plan and the development and addition of the proposed *Policy for the Application of Narrative Water Quality Objectives* (Narrative WQO Policy). The addition of the Narrative WQO Policy is the most substantive revision to the Implementation Plans chapter proposed as part of the first phase of this amendment effort. The second phase will focus on the needed remaining revisions to the Implementation Plans chapter. More staff work is needed to complete development of the other revisions to Chapter 4 identified as part of the Triennial Review process. Staff will begin work on the next phase, development of an implementation program to prevent impacts to waters of the state from application of waste to land, in the near future.

The recommended revisions to the Implementation Plans chapter included as part of the proposed WQO Update Amendment are presented below. These proposed revisions include both non-substantive (editorial) and substantive revisions to the chapter.

- Addition of a new section heading, “Regionwide Policies” to be inserted at the beginning of the chapter just after the introductory language.
- Addition of a new *Policy for the Application of Narrative Water Quality Objectives* (proposed Narrative WQO Policy) under the new “Regionwide Policies” heading. The proposed policy will describe the process the Regional Water Board uses when narrative objectives are translated into numeric limits for use in permits, orders, or other Board actions as appropriate.
- Editorial revisions to the Schedules of Compliance section to be consistent with the *Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits*.

Major portions of the Basin Plan are currently identified as “sections” within the text and Table of Contents of the Basin Plan. No numbering system is currently applied to lesser parts of these major portions. As part of this amendment, staff proposes to replace the term “sections” with “chapters” to identify the major portions of the Basin Plan and utilize the term “sections” to identify individual parts of these chapters.

The current page-numbering scheme of the Basin Plan was implemented to accommodate updating of hard copy Basin Plans on a page-by-page basis. The scheme utilizes numbering such as “4-9.00” and “4-10.00.” This allowed an updated page to easily be inserted between these pages as page “4-9.01,” for example, without the need to replace additional pages unnecessarily. Updating hard copy Basin Plans in this manner has become an uncommon occurrence due to advances in technology and improved ways of providing updates of the Basin Plan to interested parties. Most commonly, complete chapters of the Basin Plan are published in a portable document format on the Regional Water Board website. As part of this amendment, staff proposes to replace this numbering scheme with a “4-x” format.

The information contained in the Implementation Plans chapter is currently organized under three primary headings as follows:

- Point Source Measures
- Nonpoint Source Measures
- Total Maximum Daily Loads (TMDL)

This structure does not accommodate the inclusion of the proposed Narrative WQO Policy, which is applicable to both point and nonpoint sources of pollution as well as in watersheds for which a TMDL action plan has been established. To correct this deficiency, staff recommends that a new heading, “Regionwide Policies,” be inserted before the point source measures section. The proposed Narrative WQO Policy would then be inserted under this new section heading. The proposed “Aquatic Ecosystem Restoration Policy,” “Temperature Implementation Policy,” and “Groundwater Protection Policy” could be inserted under this heading following the Regional Water Board’s consideration and approval of each of these proposed amendments.

This section of the Staff Report presents staff’s rationale for each of the proposed revisions to the Implementation Plans chapter.

4.1 Addition of Proposed “Policy for the Application of Narrative Water Quality Objectives”

Regional Water Board staff identified the need to develop a new Narrative WQO Policy which will clearly articulate that the focus of the Regional Water Board’s effort to protect water quality is not restricted to the application of drinking water related maximum contaminant levels (MCLs). Application of the proposed Narrative WQO Policy will

allow staff to identify applicable sources for relevant numeric values that may be more appropriate for protecting sensitive beneficial uses of the affected surface water or groundwater waterbody. In addition, the Narrative WQO Policy will enable staff to more effectively protect drinking water supplies by identifying sources of toxicity criteria that are more protective than the California Department of Public Health MCLs.¹¹ The sources include California Public Health Goals, which are established by the Office of Environmental Health Hazard Assessment for the protection of human health and the “National Toxics Rule” (NTR) which contains chemical-specific numeric criteria for priority (toxic) pollutants. A list provided as a footnote to the proposed Narrative WQO Policy includes several possible sources for numeric values including other governmental and non-governmental agencies and organizations. This list includes, but is not limited to, the following:

- California State Water Resources Control Board
- California Department of Health
- California Office of Environmental Health Hazard Assessment
- California Department of Toxic Substances Control
- University of California Cooperative Extension
- California Department of Fish and Game
- U.S. EPA
- U.S. Food and Drug Administration
- National Academy of Sciences
- U.S. Fish and Wildlife Service
- Food and Agricultural Organization of the United Nations
- World Health Organization

The Basin Plan does not currently identify the process used to select appropriate numeric values for implementing narrative objectives. A clear statement on the process the Regional Water Board uses to establish these values will facilitate the effective protection of all applicable beneficial uses of water. An outline of this process is provided as Figure 4-1.

Other regional water boards have adopted policies into their Basin Plans that clarify the method for selecting applicable numeric values for implementing narrative water quality objectives. In developing the proposed Narrative WQO Policy, staff incorporated elements of the Central Valley Region’s Basin Plan and the San Francisco Bay Region’s Basin Plan. The proposed Narrative WQO Policy is presented in Appendix B of this Staff Report.

¹¹ The former California Department of Health Services (CDHS) was reorganized into two new departments; the Department of Health Care Services (DHCS) and the California Department of Public Health (CDPH) in July 2007 under SB 162, Chapter 241, Statutes of 2006.

When a state adopts narrative criteria, the method by which the state intends to regulate point source discharges of toxic pollutants on water quality limited segments of waterbodies based on such narrative criteria must be identified. The proposed Narrative WQO Policy meets this requirement as the Policy details the process by which Regional Water Board staff determines discharge limits or levels.

At this time, staff does not intend for the process specified in the Narrative WQO Policy to be used in the preparation of the biennial 303(d) list of water quality limited segments or the 305(b) surface water quality assessment. Section 303(d) of the federal Clean Water Act and federal regulation¹² require states to identify waterbodies that do not meet water quality standards and are not supporting their beneficial uses. These waters are placed on the Section 303(d) List of Water Quality Limited Segments, also known as the 303(d) List of Impaired Waterbodies. The List of Water Quality Limited Segments identifies the pollutant or stressor causing impairment and establishes a schedule for developing a control plan to address the impairment. Placement on this list generally triggers development of a pollution control plan (TMDL) for each waterbody and associated pollutant/stressor on the list.

4.2 Revisions to “Compliance Schedule Policy”

The *Compliance Schedule Policy* presented in the Implementation Plans chapter of the Basin Plan has been superseded by the State Water Board *Policy for Compliance Schedules in NPDES Permits*.¹³ Revisions to the existing language were made to be consistent with the State Water Board’s policy.

¹² 40 C.F.R. § 130.7.

¹³ State Water Board Resolution No. 2008-0025.

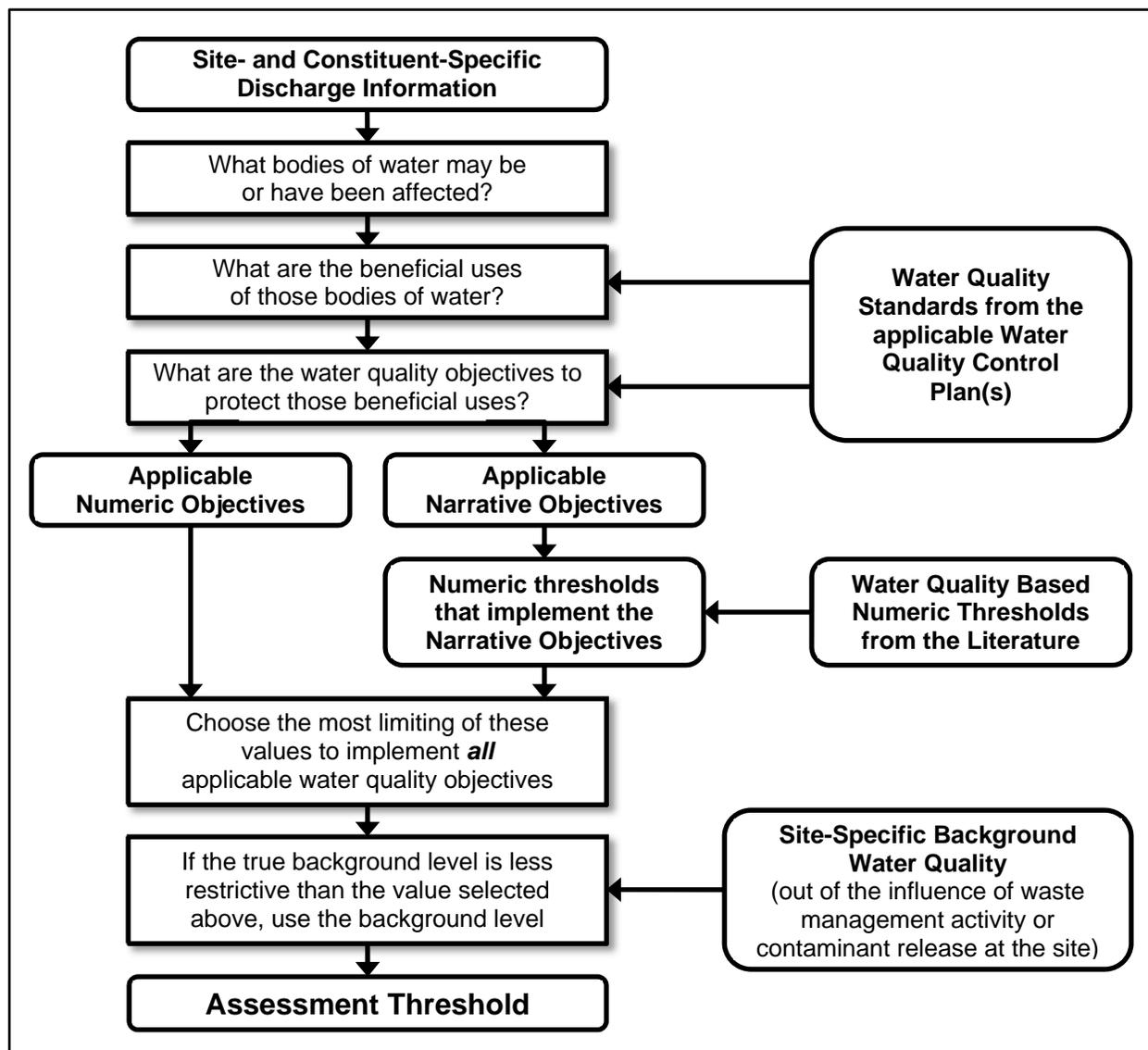


Figure 4-1. Numeric Value Selection Process for Narrative Water Quality Objectives¹⁴

¹⁴ Adapted from the State Water Board's *A Compilation of Water Quality Goals*, 16th Edition, April 2011

5. California Environmental Quality Act Requirements

The Regional Water Board is the lead agency for evaluating potential environmental impacts of proposed Basin Plan amendments pursuant to the California Environmental Quality Act (CEQA). The relevant analysis in compliance with CEQA is set forth below.

Although subject to CEQA, the Regional Water Board's basin planning process is certified by the State of California Secretary for Resources as "functionally equivalent to" CEQA. This certification exempts the Regional Water Board from the requirement to prepare an environmental impact report or initial study and negative declaration as part of the Basin Plan amendment process.¹⁵ Instead, the State Water Board has promulgated guidelines for exempt regulatory programs that describe, in part, the environmental documentation required for the adoption or approval of plans or policies.¹⁶ This documentation is collectively referred to as the substitute environmental document (SED). As provided in Section 3777 of the Water Code, the Draft SED shall consist of the following:

1. A written report prepared for the Regional Water Board containing an environmental analysis of the project;
2. A completed Environmental Checklist;
3. Other documentation as the Regional Water Board may include.

The Draft SED shall include, at a minimum, the following information

1. A brief description of the proposed project;
2. An identification of any significant or potentially significant adverse environmental impacts of the proposed project;
3. An analysis of reasonable alternatives to the project and mitigation measures to avoid or reduce any significant or potentially significant adverse environmental impacts; and
 - a. An identification of the reasonably foreseeable methods of compliance with the project;
 - b. An analysis of any reasonably foreseeable significant adverse environmental impacts associated with those methods of compliance;
 - c. An analysis of reasonably foreseeable alternative methods of compliance that would have less significant adverse environmental impacts; and
 - d. An analysis of reasonably foreseeable mitigation measures that would minimize any unavoidable significant adverse environmental impacts of the reasonably foreseeable methods of compliance.

¹⁵ Cal. Code Regs., tit. 14, § 15251, subd. (g).

¹⁶ Cal. Code Regs., tit. 23, § 3777.

The environmental analysis shall take into account a reasonable range of environmental, economic, and technical factors, population and geographic areas, and specific sites. However, the Regional Water Board is not required to conduct a site-specific project level analysis of compliance methods.

Section 3777 further provides that, if the Regional Water Board determines that no fair argument exists that the project could result in any reasonably foreseeable adverse environmental impacts, the SED shall include a finding to that effect. This finding is in lieu of an analysis of reasonable alternatives to the project and mitigation measures to avoid or reduce any significant or potentially significant adverse environmental impacts. Similarly, if the Regional Water Board determines that no fair argument exists that the reasonably foreseeable methods of compliance with the project could result in any reasonably foreseeable adverse environmental impacts, the SED shall include a finding to that effect. Again, this is in lieu of the analysis of reasonably foreseeable alternative methods of compliance and of reasonably foreseeable mitigation measures.

5.1 Description of the Proposed Project

The proposed WQO Update Amendment includes a number of actions relative to updating water quality objectives for both surface waters and groundwaters in the North Coast Region. The primary goals of the proposed WQO Update Amendment are to develop a narrative groundwater toxicity objective and to clarify the process the Regional Water Board and Board staff uses when narrative objectives are translated into numeric limits for use in permits, orders, or other regulatory actions as appropriate. The revisions proposed in the WQO Update Amendment are presented below.

Proposed revisions to Chapter 3 - Water Quality Objectives are presented below:

- Addition of a new narrative toxicity objective for groundwater.
- Deletion of Table 3-2, *Inorganic, Organic, and Fluoride Concentrations Not to be Exceeded in Domestic or Municipal Supply*.
- Addition of a new general chemical constituents objective for municipal and domestic water supplies to replace Table 3-2.
- Revision of existing numeric and narrative objectives to update language, improve clarity, and reference the proposed general chemical constituents objective for municipal and domestic water supplies in place of Table 3-2 as appropriate.
- Minor revisions to Table 3-1, *Specific Water Quality Objectives for North Coast Region* and Table 3-1a. Includes reformatting of information contained in Table 3-1, relocating information contained in footnote 5 to a new Table 3-1b (*Specific Objectives for Temperature in the Upper Trinity River*), and addition of a title to Table 3-1a (*Site-Specific Objectives (SSOs) for Dissolved Oxygen (DO) in the Mainstem Klamath River*). Tables relocated to end of chapter to improve readability.

- Revision of the Compliance with Water Quality Objectives section to include a discussion on compliance with water quality objectives for non-NPDES programs. Includes a discussion relative to the use of the proposed Narrative WQO Policy.
- Addition of references to the National Toxics Rule (NTR), California Toxics Rule (CTR), and the State Water Board Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries (SIP) to inform the reader of their applicability to surface waters in the North Coast Region.

Proposed revisions to Chapter 4 - Implementation Plans are presented below. These proposed revisions include both non-substantive (editorial) and substantive revisions to the chapter.

- Addition of a new section heading, “Regionwide Policies” to be inserted at the beginning of the chapter just after the introductory language.
- Addition of a new *Policy for the Application of Narrative Water Quality Objectives* (proposed Narrative WQO Policy) under the new “Regionwide Policies” heading. The proposed policy will describe the process the Regional Water Board uses when narrative objectives are translated into numeric limits for use in permits, orders, or other Board actions as appropriate.
- Editorial revisions to the Schedules of Compliance section to be consistent with the state compliance policy.

Other editorial (non-substantive) revisions, as presented below, will be made to both Chapters 3 and 4 to reflect revisions made as editorial amendments to previous chapters of the Basin Plan and to improve clarity and readability.

- Replacement of “Section” with “Chapter” as appropriate.
- Modification of Chapter 4 title from “Implementation Plans” to “Implementation Polices and Action Plans.”
- Removal of outdated or redundant information such as reference to appendices no longer proposed for inclusion in the Basin Plan.
- Implementation of the chapter and section number system used in previous editorial amendments of the Basin Plan (Chapters 1 and 2).
- Revision of page numbers to remove “.00” from each page, resulting in the format “3-x” and “4-x.”

The proposed revisions to Chapter 3 - Water Quality Objectives are included with this Staff Report as Appendices A and C (strikethrough/underline and clean copy, respectively). The proposed revisions to the Implementation Plans chapter are included with this Staff Report as Appendix B (strikethrough/underline). The proposed WQO Update Amendment and the rationale to support its adoption are described fully in the preceding sections of this Staff Report.

5.2 Identification of Significant Adverse Environmental Impacts

No significant or potentially significant adverse environmental impacts will result from the proposed WQO Update Amendment. The proposed revisions are designed to provide a clear articulation of the process that the Regional Water Board and Board staff currently use in establishing numeric limits from narrative objectives or in applying numeric limits that are more stringent than those established for drinking water protection. The addition of the toxicity objective will clarify that groundwater resources are to be protected for human and aquatic life beneficial uses and that toxicity can be caused by a single substance or the interaction of multiple substances. The replacement of Table 3-2 with the new general chemical constituents objective for municipal and domestic water supplies will provide clarity regarding the minimum requirements needed to protect drinking water supplies. No effect on existing regulatory programs (the environmental baseline) will result from implementation of the proposed WQO Update Amendment. The existing regulatory programs implemented by Regional Water Board staff and any impacts that they currently have on the environment are considered the baseline for environmental review and the point from which all CEQA and economic analyses start.

5.3 Analysis of Reasonable Alternatives to the Proposed Activity

As explained above, the proposed WQO Update Amendment will not cause any change to the existing regulatory programs. The Regional Water Board has determined that no fair argument exists that the proposed WQO Update Amendment could result in any reasonably foreseeable adverse environmental impacts.

5.4 Environmental Analysis of Compliance Methods

The reasonably foreseeable methods of compliance (compliance measures) are the potential actions that individuals may employ to comply with a proposed amendment.

As explained above, the proposed WQO Update Amendment will not cause any change to the existing regulatory programs. The Regional Water Board has determined that no fair argument exists that the reasonably foreseeable methods of compliance resulting from the proposed WQO Update Amendment could result in any reasonably foreseeable significant adverse environmental impacts.

5.5 CEQA Environmental Checklist, Staff Determination, and Findings

An environmental checklist based on the Title 14¹⁷ checklist was utilized by staff to evaluate potential impacts to earth, air, water, plant life, animal life, noise, light, land use, natural resources, risk of upset, population, housing, transportation, public

¹⁷ Cal. Admin. Code, tit. 14, Appendix G.

services, energy, utilities and services systems, human health, aesthetics, recreation, and archeological/historical concerns. Mandatory findings of significance regarding short-term, long-term, cumulative, and substantial impacts were also evaluated. Based on this review, staff determined that there will be no impact beyond what is currently occurring (baseline) from implementation of the requirements of the proposed WQO Update Amendment.

A significant effect on the environment is defined¹⁸ as “a *substantial, or potentially substantial, adverse change in the environment*” where “*environment*” is defined¹⁹ as “*the physical conditions which exist within the area which will be affected by a proposed project, including air, water, minerals, flora, fauna, noise, objects of historic or aesthetic significance.*”

Social or economic changes related to a physical change of the environment were also considered in determining whether there would be a significant effect on the environment. However, adverse social and economic impacts alone are not significant effects on the environment.

5.5.1 Environmental Checklist Project-Specific Information

The following section presents the project-specific information that is required as part of the Environmental Checklist.

- Project Title:
Proposed Amendment to the Water Quality Control Plan for the North Coast Region to Update Water Quality Objectives (proposed WQO Update Amendment)

- Lead Agency Name and Address:
North Coast Regional Water Quality Control Board
5550 Skylane Blvd, Suite A
Santa Rosa, CA 95403

- Contact Person and Phone Number:
Lauren Clyde, (707) 576-2674

¹⁸ Pub. Resources Code § 21068.

¹⁹ Pub. Resources Code § 21060.5.

- Project Location:

The proposed WQO Update Amendment applies to the entire North Coast Region. See Section 2.1 of this Staff Report for more information on the North Coast Region.

- Description of the Project:

The project is the proposed *Amendment to the Water Quality Control Plan for the North Coast Region to Update Water Quality Objectives*. See Section 5.1 of this Staff Report for a full description of the project.

5.5.2 CEQA Environmental Checklist

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. -- Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES -- Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
V. CULTURAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VI. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VII. GREENHOUSE GAS EMISSIONS -- Would the project:				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VIII. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X. LAND USE AND PLANNING - Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XI. MINERAL RESOURCES -- Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XII. NOISE -- Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XIII. POPULATION AND HOUSING -- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XIV. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
v) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XV. RECREATION				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XVI. TRANSPORTATION/TRAFFIC -- Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XVII. UTILITIES AND SERVICE SYSTEMS -- Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5.5.3 Preliminary Staff Determination

<input checked="" type="checkbox"/>	The proposed project COULD NOT have a significant effect on the environment, and, therefore, no alternatives or mitigation measures are proposed.
<input type="checkbox"/>	The proposed project MAY have a significant or potentially significant effect on the environment, and therefore alternatives and mitigation measures have been evaluated.

5.5.4 Discussion of Environmental Checklist Findings

I. AESTHETICS – Would the project:

a) Have a substantial adverse effect on a scenic vista?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Thus, the proposed WQO Update Amendment will not result in a substantial adverse effect on any scenic vistas.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Thus, the proposed WQO Update Amendment will not result in substantial damage to any scenic resources.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Thus, the proposed WQO Update Amendment will not result in degradation of the existing visual character or quality of any sites or their surroundings.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Thus, the proposed WQO Update Amendment will not result in a new source of substantial lighting or glare in a project area.

II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. - Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

ANSWER: No Impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Thus, the proposed WQO Update Amendment will not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

ANSWER: No Impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Thus, the proposed WQO Update Amendment will not result in conflict with existing zoning for agricultural use, or any Williamson Act contracts.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Thus, the proposed WQO Update Amendment will not result in conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

ANSWER: No Impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Thus, the proposed WQO update Amendment will not result in the loss of forest land or conversion of forest land to non-forest use.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

ANSWER: No Impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Thus, the proposed WQO Update Amendment will not result in changes to the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use.

III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. - Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Thus, the proposed WQO Update Amendment will not result in any conflict with or obstruction of the implementation of any applicable air quality plans.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Thus, the proposed WQO Update Amendment will not result in the violation of any air quality standard or contribute substantially to any existing or projected air quality violation.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Thus, the proposed WQO Update Amendment will not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

d) Expose sensitive receptors to substantial pollutant concentrations?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Thus, the proposed WQO Update Amendment will not result in exposing sensitive receptors to substantial pollutant concentrations.

e) Create objectionable odors affecting a substantial number of people?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Thus, the proposed WQO Update Amendment will not result in the creation of objectionable odors affecting a substantial number of people.

IV. BIOLOGICAL RESOURCES - Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game (CDFG) or U.S. Fish and Wildlife Service (U.S. FWS)?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Thus, the proposed WQO Update Amendment will not result in a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game (CDFG) or U.S. Fish and Wildlife Service (U.S. FWS).

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Thus, the proposed WQO Update Amendment will not result in a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFG or U.S. FWS.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Thus, the proposed WQO Update Amendment will not result in a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Thus, the proposed WQO Update Amendment will not result in substantial interference with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Thus, the proposed WQO Update Amendment will not result in conflict with any local policies or ordinances protecting biological resources.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Thus, the proposed WQO Update Amendment will not result in conflict with the provisions of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or approved local, regional, or state habitat conservation plan..

V. CULTURAL RESOURCES: Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Thus, the proposed WQO Update Amendment will not result in substantial adverse change in the significance of a historical resource as defined in § 15064.5.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Thus, the proposed WQO Update Amendment will not result in a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Thus, the proposed WQO Update Amendment will not result in directly or indirectly destroying a unique paleontological resource or site or unique geologic feature.

d) Disturb any human remains, including those interred outside of formal cemeteries?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Thus, the proposed WQO Update Amendment will not result in the disturbance of any human remains, including those interred outside of formal cemeteries.

VI. GEOLOGY AND SOILS - Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Thus, the proposed WQO Update Amendment will not result in exposing people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault.

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

ii) Strong seismic ground shaking?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Thus, the proposed WQO Update Amendment will not result in exposing people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

iii) Seismic-related ground failure, including liquefaction?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Thus, the proposed WQO Update Amendment will not result in exposing people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction.

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
iv) Landslides?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Thus, the proposed WQO Update Amendment will not result in exposing people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. Neither the proposed WQO Amendment nor the reasonably foreseeable means of compliance involve moving permanent structures or people into an area potentially subject to landslides.

b) Result in substantial soil erosion or the loss of topsoil?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Thus, the proposed WQO Update Amendment will not result in substantial erosion of soils or the loss of topsoil.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Thus, the proposed WQO Update Amendment will not result in a project located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Thus, the proposed WQO Update Amendment will not result in a project that would be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in a need to access to sewer systems or septic tanks, thus this question is not applicable.

VII. GREENHOUSE GAS EMISSIONS - Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in the generation of greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in a conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

VIII. HAZARDS AND HAZARDOUS MATERIALS - Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in creating a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in the emission of hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in a project being located on a hazardous materials site.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in a safety hazard for people residing or working in the project area.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). Implementation of the proposed WQO Update Amendment will not result in a safety hazard for people residing or working in the project area.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in impairing implementation of or physical interference with an adopted emergency response plan or emergency evacuation plan.

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in exposing people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

IX. HYDROLOGY AND WATER QUALITY - Would the project:

a) Violate any water quality standards or waste discharge requirements?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in the violation of any water quality standards or waste discharge requirements

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in the substantial depletion of groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in substantial alteration of the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in a substantial alteration of the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or a substantial increase in the rate or amount of surface runoff in a manner which would result in flooding.

e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in the creation of or contribution to runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

f) Otherwise substantially degrade water quality?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in a substantial degradation of water quality.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in the placement of housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in the placement of structures which would impede or redirect flood flows within a 100-year flood hazard area.

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in exposing people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

j) Cause inundation by seiche, tsunami, or mudflow?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in causing inundation by seiche, tsunami, or mudflow.

X. LAND USE AND PLANNING - Would the project:

a) Physically divide an established community?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in the physical division of an established community.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in conflict with any applicable habitat conservation plan or natural community conservation plan.

XI. MINERAL RESOURCES - Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

XII. NOISE - Would the project result in:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in the exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in exposing people residing or working in the project area to excessive noise levels.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in exposing people residing or working in the project area to excessive noise levels, within the vicinity of a private airstrip.

XIII. POPULATION AND HOUSING - Would the project:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in inducing substantial population growth in an area, either directly or indirectly.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in displacing substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in displacing substantial numbers of people, necessitating the construction of replacement housing elsewhere.

XIV. PUBLIC SERVICES:

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

i) Fire protection?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services.

ii) Police protection?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection services.

iii) Schools?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools or school services.

iv) Parks?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks or park services.

v) Other public facilities?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for public facilities or services thereof.

XV. RECREATION:

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in an increase of the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in a requirement to construct or expand recreational facilities which might have an adverse physical effect on the environment. Nor will the proposed WQO Update Amendment result in any project which includes recreational facilities.

XVI. TRANSPORTATION/TRAFFIC - Would the project:

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in conflict with any applicable congestion management program.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in a substantial increase of hazards due to a design feature or incompatible uses.

e) Result in inadequate emergency access?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in inadequate emergency access.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

XVII. UTILITIES AND SERVICE SYSTEMS - Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in an exceedance of wastewater treatment requirements of the Regional Water Board.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in a requirement to construct new water or wastewater treatment facilities or expand existing facilities, the construction of which could cause significant environmental effects. Nor with the proposed WQO Update Amendment result in a project which will result in construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in a requirement to construct new storm water drainage facilities or expand existing facilities, the construction of which could cause significant environmental effects. Nor will the proposed WQO Update Amendment result in a project which will result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in a requirement for new or expanded water supply entitlements.

e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline).

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline).

g) Comply with federal, state, and local statutes and regulations related to solid waste?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline).

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE:

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in a degradation of the quality of the environment, a substantial reduction in the habitat of a fish or wildlife species, a drop in fish or wildlife population to below self-sustaining levels, a threat to eliminate a plant or animal community, a reduction of the number or restriction of the range of a rare or endangered plant or animal, or the elimination of important examples of the major periods of California history or prehistory.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in projects with individually limited impacts, that when taken cumulatively, result in a considerable impact.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

ANSWER: No impact.

DISCUSSION: The revisions to the Water Quality Objectives and the Implementation Plans chapters of the Basin Plan will not result in any environmental impacts beyond what is currently occurring under the Regional Water Board's regulatory programs (current baseline). The proposed WQO Update Amendment will not result in environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly.

5.6 Economic Analysis

The California Environmental Quality Act (CEQA) requires that a consideration of economic factors be included in an environmental analysis for regulations that require installation of pollution control equipment or a performance standard.

The adoption of the proposed WQO Update Amendment, described in Sections 3 and 4 of the Staff Report, will not change the way the Regional Water Board programs regulate discharges, nor result in additional costs to dischargers. There are no activities associated with implementation of the proposed WQO Update Amendment beyond what is currently required of dischargers. Therefore, there will be no additional costs incurred as a result of the adoption of the proposed WQO Update Amendment.

6. Antidegradation Analysis

This section of the Staff Report provides the regulatory analyses required to determine if the proposed WQO Update Amendment is consistent with federal and state antidegradation policies.

Both U.S. EPA and the State Water Board have adopted antidegradation policies as part of an approach to develop water quality standards and regulate the discharge of waste.

Clean Water Act Section 303(c) requires that states adopt and modify, as appropriate, water quality standards for surface waters that protect public health and welfare, enhance the quality of water, and serve the purposes of the Clean Water Act. A water quality standard defines the water quality goals of a waterbody by:

- Designating the use or uses to be made of the water (beneficial uses);
- Setting numeric and/or narrative water quality objectives necessary to protect those uses; and
- Preventing degradation of water quality through antidegradation provisions.²⁰

Water quality objectives must be based on sound scientific rationale and protect the beneficial uses of the receiving water.²¹ Regional water boards must adopt water quality objectives that reasonably protect beneficial uses and prevent nuisance.²²

The federal antidegradation policy requires that existing instream designated uses and the level of water quality necessary to protect the existing uses be maintained and protected.²³ As defined in the federal policy,²⁴ existing uses are those uses actually attained in the waterbody on or after November 28, 1975, whether or not they are included in the water quality standards. Where, however, the quality of the water exceeds levels necessary to support propagation of fish, shellfish, and wildlife, and recreation in and out of the water, that quality must be maintained and protected unless the state finds that:

1. Such activity is necessary to accommodate important economic or social development in the area in which the waters are located;
2. Water quality is adequate to protect existing beneficial uses fully; and

²⁰ U.S. EPA, Guidance re: Antidegradation; regulatory interpretation of 40 C.F.R. § 131.12(a)(2), March 1994.

²¹ 40 C.F.R. § 131.11.

²² Wat. Code § 13241.

²³ 40 C.F.R. § 131.12.

²⁴ 40 C.F.R. § 131.3(e).

3. The highest statutory and regulatory requirements for all new and existing point source discharges and all cost-effective and reasonable best management practices for nonpoint source control are achieved.²⁵

The federal policy also requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in 1968 with adoption of the *Statement of Policy for Respect to Maintaining High Quality of Waters in California* (state Antidegradation Policy).²⁶ The state Antidegradation Policy is considered to incorporate the federal Antidegradation Policy where the federal policy applies.²⁷

The state Antidegradation Policy expresses the State Water Board's intent that the quality of existing high quality waters be maintained to the maximum extent possible. The state antidegradation Policy, unlike the federal policy, applies to both groundwater and surface waters whose quality meets or exceeds (are better than) water quality objectives.

The state Antidegradation Policy requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The state Antidegradation Policy allows for the lowering of water quality only if the change:

- Is consistent with the maximum benefit to the people of the state;
- Will not unreasonably affect present and anticipated beneficial uses of waters; and
- Will not result in water quality less than that prescribed in applicable policies.

In addition, before any degradation of water quality is permitted, it must be shown that the discharge will be required to meet waste discharge requirements that result in best practicable treatment or control of the discharge necessary to assure that:

- Pollution or nuisance will not occur;
- The highest water quality consistent with maximum benefit to the people of the state is maintained.

Issues of antidegradation are considered by the Regional Water Board when issuing, reissuing, amending, or revising permits if there is the potential for water quality degradation from the discharge. Antidegradation analyses are routinely prepared as part of the Regional Water Board's permit adoption process. Nonetheless, as part of this proposed WQO Update Amendment, Regional Water Board staff has considered compliance with the federal and state antidegradation policies.

²⁵ 40 C.F.R. § 131.12.

²⁶ State Water Board Resolution No. 68-16.

²⁷ State Water Board Order WQO 86-17.

The state Antidegradation Policy is summarized in the Basin Plan as a General Objective for the user's convenience.

6.1 Antidegradation Analysis for the Proposed WQO Update Amendment

It is the professional judgment of the Regional Water Board staff that implementation of the proposed WQO Update Amendment will serve to more transparently implement the State Water Board *Sources of Drinking Water Policy*,²⁸ the state and federal antidegradation policies, and other provisions of the Basin Plan. The adoption of the proposed groundwater toxicity objective and the proposed general chemical constituents objective for municipal and domestic water supplies will not degrade water quality. Staff has determined that the adoption of the proposed amendment may incidentally result in enhanced protection to receiving waters in the North Coast Region by more clearly articulating the standards that will be used in determining what constitutes toxicity and compliance with Title 22 drinking water regulations. It is important to note that the Regional Water Board is already requiring the same level of water quality protection in terms of both the toxicity factors and drinking water supply protection. This level of protection has been achieved by relying on the existing groundwater chemical constituents objective and Table 3-2, footnote 2 of the Basin Plan. Footnote 2 permits the use of numeric values that are more stringent than those presented in Table 3-2 if needed to protect non-drinking water related beneficial uses.

Furthermore, it is the professional judgment of the Regional Water Board staff that substituting the proposed new general chemical constituents objective for municipal and domestic water supplies for the information contained in Table 3-2 is appropriate and scientifically defensible. Regional Water Board staff have been using the same process as that presented in the proposed Narrative WQO Policy to determine numeric limits or values for use in permits, orders, or other regulatory actions.

The establishment of the numeric values in permits, orders, or other Board actions following adoption of the WQO Update Amendment will be at least as stringent as the numeric values currently presented in Table 3-2. The implementation of the provisions contained in the proposed Basin Plan amendment; therefore, will not result in a reduction in the quality of water. Of the 126 priority pollutants included in the National Toxics Rule (NTR) and the California Toxics Rule (CTR), only 27 are included in Table 3-2. A comparison of these values indicates that only chlorobenzene and endrin have lower values presented in Table 3-2 than those more recently established under Title 22 to protect drinking water supplies. However, when staff recommends a constituent value for inclusion as a permit or cleanup order limit, staff selects the value that protects all beneficial uses of water, including the use that is most sensitive to the constituent of concern. Often the most sensitive beneficial use is related to aquatic species protection as aquatic species are frequently affected by lower levels of a given chemical

²⁸ State Water Board Resolution 88-63.

constituent than that required for drinking water supply protection. As such, the value that protects the most sensitive use is used to derive the numeric limits used in permits, cleanup orders, or other regulatory actions as appropriate.

State and federal antidegradation policies require that anticipated beneficial uses, as well as existing, are maintained and protected. The federal Antidegradation Policy also requires that existing high quality water (water that exceeds standards or is better than that needed to protect existing beneficial uses) must be maintained unless lower quality is deemed necessary to allow important economic or social development. It is staff's professional judgment that the limits established under the proposed Narrative WQO Policy will ensure that a discharge does not degrade water quality. The process presented in the proposed Narrative WQO Policy will result in staff recommending a value that is protective of the most sensitive beneficial use of water (e.g., water supplies, aquatic resources). This approach will ensure that no degradation will occur which unreasonably affects the most sensitive beneficial use. This approach will also ensure that current water quality will be maintained at a minimum unless criteria of state and federal Antidegradation policies have been met.

As set forth in the environmental analysis included in Section 5 of this Staff Report, it is Regional Water Board staff's position that the proposed WQO Update Amendment will not result in negative impacts to water quality and will provide a clear regulatory approach for establishing water quality limits.

7. Water Quality Objectives Analysis

This section of the Staff Report provides the regulatory analyses required when water quality objectives and associated implementation plans are amended into the Basin Plan. California Water Code Section 13241 requires consideration of a variety of factors when establishing a new water quality objective. This section also includes a discussion of economic considerations in accordance with Public Resources Code Section 21159(c) which requires an analysis of economic factors related to costs of implementation of the new rules or regulations.

California Water Code Section 13241 identifies six factors that must be analyzed when establishing a new water quality objective. These factors include:

- Past, present, and probable beneficial uses of water;
- Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto;
- Water quality conditions that could reasonably be achieved through the coordinated control of all factors that affect water quality in the area;
- Economic considerations;
- The need for developing housing within the region; and
- The need to develop and use recycled water.

Regional Water Board staff has determined that an analysis as required by Section 13241 is required as part of the adoption for the proposed WQO Update Amendment as two new objectives are proposed for incorporation into the Basin Plan. The analysis is presented below.

7.1 Beneficial Uses of Water in the North Coast Region

Existing and potential beneficial uses of waters in the North Coast Region are identified in the Basin Plan (Table 2-1). Surface water beneficial uses are identified for each hydrologic unit in the region. In addition, beneficial uses are identified for broad categories of waters including bays, estuaries, minor coastal streams, ocean waters, wetlands, and groundwaters. Regional water boards are required to protect beneficial uses of water²⁹ if they exist in a waterbody, even if they are not currently listed in Table 2-1 in the Basin Plan.³⁰

²⁹ Wat. Code § 13241.

³⁰ *City of Arcadia v. State Water Resources Control Bd.* (2010) 191 Cal. App. 4th 156, 170.

Groundwater beneficial uses identified in the North Coast Region (Table 2-1) include:

MUN	Municipal and Domestic Water Supply
AGR	Agricultural Water Supply
IND	Industrial Service Supply
PROC	Industrial Process Supply
AQUA	Aquaculture
CUL	Native American Cultural

Beneficial uses of surface water identified in the North Coast Region (Table 2-1) include:

MUN	Municipal and Domestic Supply
AGR	Agricultural Supply
IND	Industrial Service Supply
PRO	Industrial Process Supply
GWR	Groundwater Recharge
FRSH	Freshwater Replenishment
NAV	Navigation
POW	Hydropower Generation
REC-1	Water Contact Recreation
REC-2	Non-Contact Water Recreation
COMM	Commercial and Sport Fishing
WARM	Warm Freshwater Habitat
COLD	Cold Freshwater Habitat
ASBS	Preservation of Areas of Special Biological Significance
SAL	Inland Saline Water Habitat
WILD	Wildlife Habitat
RARE	Rare, Threatened or Endangered Species
MAR	Marine Habitat
MIGR	Migration of Aquatic Organisms
SPWN	Spawning, Reproduction, and/or Early Development
SHELL	Shellfish Harvesting
EST	Estuarine Habitat
AQUA	Aquaculture
CUL	Native American Culture
FLD	Flood Peak Attenuation / Flood Water Storage
WET	Wetland Habitat
WQE	Water Quality Enhancement
FISH	Subsistence Fishing

These groundwater and surface water beneficial uses adequately represent past, present, and probable future beneficial uses. Addition of a groundwater toxicity objective and the general chemical constituents objective for municipal and domestic water supplies (to replace Table 3-2) will not affect protection of existing beneficial uses. Effluent limitations are established to protect the most sensitive existing beneficial use

of the receiving water. The proposed objectives are fully protective of surface water and groundwater beneficial uses.

7.2 Environmental Characteristics of the Hydrographic Units

Implementation of the proposed general chemical constituents objective for municipal and domestic water supplies and the proposed groundwater toxicity objective will not affect the hydrology of any surface waterbody or groundwater basin within the North Coast Region. Summary information on the surface water hydrological units and the groundwater basins in the region has been provided below for informational purposes.

The North Coast Hydrologic Region covers roughly 19,500 square miles, or more than 12 percent of California's land area. Mountain crests form the eastern boundary of the region while the Pacific Ocean shoreline forms the western boundary. All streams in the region empty into the Pacific Ocean. The regional Basin Plan divides the North Coast region into two natural drainage basins - the Klamath River Basin and the North Coastal Basin.

The Klamath River begins at Upper Klamath Lake in Oregon, then drains through the Klamath and Siskiyou mountains, ending at the Pacific Ocean about 20 miles south of Crescent City. Major California tributaries of the Klamath include the Shasta, Scott, Salmon, and Trinity rivers. The Klamath watershed management area is divided into three sub-basins: Lower Klamath, Middle Klamath, and Upper Klamath.

The Lower Klamath sub-basin covers 2,564 square miles and includes the Salmon River, Blue Creek, and Klamath River delta/estuary. The Middle Klamath sub-basin covers 2,850 square miles and includes both the Shasta and Scott rivers. The Upper Klamath sub-basin is partially located in California and includes the portion of the Klamath flowing into the state from Oregon. The primary subwatershed within the California portion of the Upper Klamath sub-basin is the Lost River watershed, which covers about 1,689 square miles.

The Trinity River is the largest tributary to the Klamath River, having a drainage basin area of about 2,900 square miles. Annual precipitation within the basin averages 57 inches.

The North Coastal Basin is divided into four watershed management areas: Humboldt Bay, Eel River, Russian/Bodega, and North Coast. The Humboldt Bay watershed management area major river systems include the Mad River and Redwood Creek. Additional waterbodies include Humboldt Bay, Mad River Slough, and coastal lagoons. Precipitation in the basin ranges from 32 to 98 inches annually.

The Eel River and its tributaries comprise the third largest river system in California. Principal tributaries include the Middle, North, and South forks of the Eel River, Black Butte River, and the Van Duzen River. The Eel River watershed management area encompasses roughly 3,684 square miles. In most of the alluvial valleys, surface water

and groundwater are closely connected. For this reason, surface water withdrawals have a substantial effect on local groundwater supplies.

The Russian/Bodega watershed management area includes the Russian River and Bodega hydrologic units including Bodega Bay, Bodega Harbor, Salmon Creek, Americano Creek, and Stemple Creek watersheds. The Russian River hydrologic unit encompasses 1,485 square miles in Mendocino and Sonoma counties. Average annual precipitation ranges from 30 to 80 inches within the area. The Bodega hydrologic unit contains streams with headwaters in the Coast Range that enter the Pacific Ocean south of the Russian River. Annual precipitation between 32 and 42 inches is common in the watershed.

The North Coast watershed management area includes rivers not included in other watershed management areas. The major watersheds are the Smith, Bear, Mattole, Ten Mile, Noyo, Big, Albion, Navarro, Garcia, and Gualala rivers and Greenwood, Elk and Alder creeks.

There are a total of sixty-two groundwater basins and sub-basins in the North Coast Region. Regional Water Board staff has categorized the groundwater basins in the North Coast Region as “small,” “medium,” and “large.” The forty-six small basins make up seventy-two percent of the designated basins by number but only sixteen percent by area, while the six large basins are only nine percent by number but forty-nine percent by area. The large basins generally have deeper and more productive aquifers than the small basins, which means that the six large basins combined probably provide significantly more than half the water produced from all the groundwater basins in the region.

In contrast to groundwater basins, percolation areas are areas in which groundwater is transmitted primarily through fractures in bedrock. These areas cover about 92.5 percent of the region. Percolation areas include almost all of the high ground as well as some lower lying areas in the region.

7.3 Achievable Water Quality Conditions

Key pollution threats to groundwater and surface water in the region include industrial wastes, leaking petroleum tanks, septic leakage, urban and agricultural runoff, forestland and urban road runoff, and the disposal of waste to land and to surface waters. In addition to protecting the beneficial uses of groundwaters identified in the Basin Plan, protection of groundwater resources is also an important component in the protection of a number of beneficial uses associated with surface waters, such as providing cold water habitat (COLD) from inflow of cold groundwater to streams during warm summer conditions.

Under the proposed WQO Update Amendment discharges must meet applicable water quality objectives or, if the limit is not being met due to the discharge of toxic pollutants, staff would need to determine the causative pollutant. If a discharge were contributing

to the accumulation of the pollutant causing the degradation, the discharger would be required under existing authority to control the pollutant to the extent practical through control methods or additional treatment. The same approach would occur if multiple discharges contribute to the accumulation of a pollutant.

If the proposed WQO Update Amendment is adopted, the establishment of numeric limits for use in permits, cleanup orders, or other regulatory programs, as the Regional Water Board deems appropriate, will utilize a process that is similar to the one currently used by Regional Water Board.

The limited water quality data available indicates the water quality objectives are achievable under the proposed WQO Update Amendment using the proposed Narrative WQO Policy in concert with the established programs implemented in the Region.

7.4 Economic Considerations

Based on the review of water quality data, there is insufficient data to conclude if all groundwaters and surface waters are attaining the proposed objectives. Adoption of the WQO Update Amendment including the proposed objectives will not change the way staff regulates discharges. There is already a network of extensive monitoring and assessment activities supporting the existing (baseline) regulatory framework in the region. Absent the proposed amendment, these activities will continue, and additional efforts will likely be undertaken (e.g., as regional boards assess compliance with existing objectives for toxicity, and address sites currently impaired for toxicity). Similarly, in instances in which toxicity exceeds baseline objectives, assessment of the causes and sources will be needed to identify methods of compliance with the objectives. Thus, there will be no additional costs to dischargers or responsible parties to implement the proposed WQO Update Amendment.

7.5 Development of Housing Within the Region

The adoption of the proposed WQO Update Amendment will have no impact on the need for, or ability to develop, housing in the North Coast Region. The proposed amendment applies only to the protection of water quality in the Region. It could possibly indirectly improve the ability to develop housing to the extent it continues to protect groundwater and surface waters which are necessary to support drinking water supplies.

7.6 Need to Develop and Use Recycled Water

The adoption of the Proposed WQO Update Amendment will not adversely impact the ability to develop and use recycled water in the Basin. In addition, the Proposed WQO Update Amendment will not change the regulatory programs and limitations that are used by the Regional Water Board to protect groundwater supplies.

7.7 Implementation Program

The program of implementation³¹ for achieving water quality objectives shall include, but shall not be limited to:

- A description of the nature of actions which are necessary to achieve the objectives, including recommendations for appropriate action by any entity, public or private;
- A time schedule for the actions to be taken; and
- A description of surveillance to be undertaken to determine compliance with objectives.

When the proposed WQO Update Amendment becomes effective, no additional actions would be necessary to achieve the new objectives as implementation of the existing chemical constituents objective and protection of drinking water supplies is already in place. The toxicity limits for individual permits will be set by implementing the proposed Narrative WQO Policy which articulates the process staff is currently using. This process requires monitoring and reporting of toxicity levels using the current groundwater chemical constituents objective and other objectives.

The groundwater toxicity objective is already implemented under the existing groundwater chemical constituents objective and the general chemical constituents objective for municipal and domestic water supplies. The proposed objectives are also implementing existing law as laid out in the California Water Code.³² Therefore, no additional actions beyond those already required as part of the current regulatory programs are needed to achieve compliance with the proposed water quality objectives.

No additional actions are necessary to implement the proposed WQO Update Amendment including the proposed narrative toxicity objective for groundwaters, the proposed general chemical constituents objective for municipal and domestic water supplies, and the proposed Narrative WQO Policy. Time schedules will continue to be included in individual permits.

Staff envisions that the type of monitoring programs that will be required to ensure compliance with the two proposed objectives will be the same as those currently required for discharges. The recommended additions of the proposed narrative toxicity objective for groundwater, the proposed general chemical constituents objective for municipal and domestic water supplies, and the addition of the proposed Narrative WQO Policy to the Basin Plan will provide a more transparent description of the process staff and the Board use in translating narrative objectives into numeric limits.

³¹ Wat. Code § 13242.

³² Wat. Code § 13241.

8. Public Participation Plan

This section of the Staff Report describes the efforts of the Regional Water Board to have successful, effective, and efficient public participation in the development of the proposed WQO Update Amendment. The efforts identified in this chapter have been, or will be, carried out to identify interested stakeholders and to inform the public on development of the proposed WQO Update Amendment. Regional Water Board staff worked to solicit early public comments on this proposal. Stakeholders include landowners, residents, business owners, special interest groups, governmental officials and staff, non-governmental organizations, and other interested parties.

The primary goals of stakeholder outreach efforts are as follows:

- To communicate and inform stakeholders about the proposed Basin Plan amendment, including the status of the development of the amendment, alternatives considered, implementation program options, potential environmental impacts, and other components of the Basin Plan amendment process.
- To solicit and receive relevant and timely input from stakeholders.

8.1 Framework for Stakeholder Involvement

Regional Water Board staff will use a number of avenues to provide information and opportunities for continued public involvement in the proposed WQO Update Amendment.

An informational webpage is maintained with contact information, status updates, links to available documents, public notices of meetings and comment periods, and other opportunities for stakeholder involvement.

Appropriate revisions to the proposed WQO Update Amendment will be made by staff in response to public comments. The review and comment period will last for a minimum of 45 days. Staff will respond to all written comments received during the comment period. The “Response to Comments” document will be posted on the webpage, and made available to the public and Board members prior to the adoption hearing

Notices of public meetings, document availability, public comment periods, and other opportunities for stakeholder involvement are sent via e-mail to interested parties that have provided their e-mail address or signed up via the web-based email list subscription form. Hard copies will be provided if requested by interested parties. As required by law, public notice of the Regional Water Board hearing to consider adoption

of the proposed Basin Plan amendment will be printed in a newspaper of general circulation within the region.³³

The Staff Report, including the proposed WQO Update Amendment language and the environmental checklist and analyses (referred to as the substitute environmental documentation) will be available for Regional Water Board and public review and comment for at least 45 days prior to the Regional Water Board's consideration of the proposed amendment.

Whenever requested, staff will meet with interested stakeholders to provide updates and receive comments on the proposed WQO Update Amendment. Regional Water Board staff plan to meet with many of the stakeholder groups that are currently involved with water quality issues in the region in order to seek input and communicate the status of the proposed WQO Update Amendment. If feasible, staff may attend regular meetings of established stakeholder groups, or staff may organize separate ad hoc meetings.

8.2 Regional Water Board Adoption Hearing

Regional Water Board staff plan to present the proposed WQO Update Amendment to the Regional Water Board for adoption in mid-2012. During the adoption hearing, the public will be provided an additional opportunity to comment on matters related to the proposed WQO Update Amendment before the Board makes a final determination.

³³ Wat. Code § 13244.