

APPENDIX B

Staff Report for

Proposed Basin Plan Amendment

**2005 Basin Plan General Update
With Non-regulatory Revisions**

San Francisco Bay Basin Water Quality Control Plan

**2005 Basin Plan General Update
With Non-regulatory Revisions**

Staff Report

October 19, 2005

Prepared by Sarah Raker, Steve Moore, and Jeff Kapellas
California Regional Water Quality Control Board
San Francisco Bay Region

Table of Contents

INTRODUCTION	1
WHAT'S NEW.....	3
CHAPTER-SPECIFIC UPDATES	4
SCHEDULE	13
REFERENCES	15

List Of Appendices

- Appendix A – Proposed Basin Plan Amendment without Underline-Strikeout Marks
- Appendix B – Prioritized Basin Plan Triennial Issue List from the 2004 Triennial Review
- Appendix C – Tables of Beneficial Use Designations of Surface Water Bodies, 1975, 1986, and 1995 Basin Plans
- Appendix D – Table D-1 Comparison of Groundwater Basin Designations, Department of Water Resources Bulletin 118 1980 and 2003

INTRODUCTION

This staff report summarizes the proposed amendment to the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan). The Basin Plan establishes water quality standards for the San Francisco Bay Region (Region). The purpose of the proposed Basin Plan amendment is to update the Basin Plan with more current program descriptions for surface water, groundwater, and wetlands, and to correct any identified errors. The proposed changes to the Basin Plan are presented in Appendix A as a clean final version, and the underline-strikeout version is Exhibit A of the tentative resolution.

The Porter-Cologne Water Quality Control Act establishes the authority for adopting Basin Plans and the requirements for amending Basin Plans (California Water Code Section 13240). Basin Plan amendments generally require four levels of administrative approval, depending on the scope of the proposed amendment: 1) San Francisco Bay Regional Water Quality Control Board (Water Board), 2) State Water Resources Control Board (State Water Board), 3) Office of Administrative Law (OAL), and 4) U. S. Environmental Protection Agency (U.S. EPA). After the proposed amendment has been reviewed and commented on by the public, the Water Board may adopt the amendment, which is then subject to approval by the State Water Board. All regulatory changes proposed in a Basin Plan amendment also require scientific peer review before being submitted to the State Water Board. Regulatory changes are also subject to approval by OAL. In addition, when regulatory changes are being proposed that affect surface water quality objectives, the U.S. EPA must approve the amendment.

The Water Board first adopted a plan for waters inland from the Golden Gate in 1968. After several revisions, the first comprehensive Basin Plan for the Region was adopted by the Water Board and approved by the State Water Board in April 1975. Subsequently, major revisions were adopted in 1982, 1986, 1992, 1995, 2002, and 2004, to address changing water quality conditions, priorities, and programs.

This proposed Basin Plan amendment does not contain any proposed changes in regulations or any changes in surface water quality objectives. Rather, it contains information, corrections, and general references and therefore does not require scientific peer review. The new language and revised table and figures are intended solely for the convenience of the Basin Plan reader.

The scope of the proposed Basin Plan changes is not intended to be exhaustive. Non-regulatory revisions presented in this proposed Basin Plan amendment are for programs that have undergone significant changes since 1995, and do not include proposed revisions to the programs that are currently undergoing major regulatory review, such as the urban runoff program. This proposed amendment also does not address the proposed revisions to the Long Term Management Strategy that is undergoing a separate Basin Plan amendment process.

Basin Plan amendments are generally required to provide a California Environmental Quality Act (CEQA) checklist to demonstrate the functional equivalence of the CEQA requirements for preparation of an environmental impact report or negative declaration and initial study. Because this proposed Basin Plan amendment consists of only editorial changes, updates and corrections, and does not propose any regulatory changes, it is not a "project" under the CEQA definition because it has no potential for any direct or indirect physical change in the environment.

This proposed Basin Plan Amendment meets several objectives set forth in the 2004 Triennial Review (Water Board, 2004a). The primary purpose of the Triennial Review is to review water quality standards and take public comment on issues the Water Board should address in the future through the Basin Plan amendment process. The 2004 Triennial Review summarized the planning work to be accomplished over the following three years. The following Basin Plan issues presented in the Triennial Review are being addressed in this proposed Basin Plan amendment (Appendix B):

Priority No.	Description
1	Basin Plan Maps
2	Electronic and Web Accessible Basin Plan
5	Groundwater editorial changes
6	Groundwater South Bay prioritization
6	Water Body Beneficial Use update
9	Water Conservation and Recycling
13	NPDES editorial changes
13	Watershed editorial changes
13	Onsite Wastewater Systems Update
16	Environmental Screening Level Process
24	Groundwater Institutional Controls
27	Surface Water Groundwater Interactions

We would like to thank and acknowledge the following colleagues who contributed to the preparation of this proposed Basin Plan amendment: Blair Allen, Andree Breaux, Mary Rose Cassa, Richard Condit, Chuck Headlee, Stephen Hill, John Kaiser, Debbi Egter Van Wissekerke, Linda Rao, Curtis Scott, Terry Seward, Lila Tang, Derek Whitworth, Yuri Won, and Ed Wosika.

WHAT'S NEW

The proposed changes in this Basin Plan amendment fall into three groups (1) document organizational update; (2) beneficial use maps and tables update, including correction of errors; and (3) program description updates. Document organizational changes include a numbering scheme for Basin Plan sections to facilitate citations, a list of acronyms, and formation of a new Chapter 7 for total maximum daily loads (TMDLs) and other specific Water Quality Attainment Strategies. A review of the designated beneficial uses and water bodies in previously printed Basin Plans led to identification of a number of errors that need correction. The maps in the Basin Plan have been updated using up-to-date mapping technology. The proposed Basin Plan amendment also revises the "State Water Resources Control Board" and "Regional Water Quality Control Board" names to State Water Board and Water Board, respectively, to reflect the terms now used in our regulatory actions.

The Basin Plan's appearance will benefit from the updated maps, tables and desktop publishing. San Francisco Estuary Project staff assisted Water Board staff in the design of a new look and to create a Basin Plan file on our website that is printable by both color and black-and-white printers. This proposed Basin Plan amendment includes links to websites and portable document files (pdf) that will be readily assessable to the public in the on-line version of the Basin Plan. Links are highlighted in **bold** in the text.

In addition to these new features, this proposed Basin Plan amendment shows text that should be deleted. The proposed deletions are for text that describes out-of-date programs or historical references, or text that has been updated and clarified in the proposed new text.

Exhibit A of the tentative resolution contains the proposed changes to the text and tables. The deletions are marked with ~~strikeout~~ and the additions are marked with underline. Appendix A of this staff report contains the proposed Basin Plan amendment with the strikeout and underline marks removed. Appendix A contains the revised text, revised Table 2-1 only, and all the proposed updated figures.

Additional text changes were made to the proposed Basin Plan amendment since the public notice was submitted on August 12, 2005, in response to comments received from the public and staff-initiated changes. Substantive changes are shown as follows:

- ✓ New text inserted since the August 12, 2005, version is shown in *italics and underline*.
- ✓ Text deleted since the August 12, 2005, version is shown in ~~underline and strikeout~~.
- ✓ Text previously proposed for deletion in the August 12, 2005, version that is now proposed to remain in the Basin Plan is shown in plain type and double underline.

CHAPTER-SPECIFIC UPDATES

The following updates, revisions, and deletions to Chapters 1 through 7 are proposed.

Chapter 1 Introduction

1. Update the description of **Watershed Management Approach** to be consistent with the statewide Watershed Management Initiative (WMI), including:
 - Reference to the Strategic Plan for the State and Regional Water Boards (State Water Board, 2001a);
 - Targeting of problems based on water quality monitoring and surveillance;
 - Promotion of stakeholder involvement;
 - Use of a multi-agency approach to problem solving;
 - Measurement of success through monitoring; and
 - Expanding the focus from point source regulation to include diffuse urban and agricultural sources.

Chapter 2 Beneficial Uses

2. Revise the basemaps for hydrologic basins based on the California Interagency Watershed map of 1999 (Calwater, 1999), with supplemental information from the Creek & Watershed Map Series produced by the Oakland Museum of California (Oakland Museum, 1993, 2001, 2003, 2004, and 2005), the Contra Costa County Watershed Atlas (Contra Costa County Community Development Department, 2003), and the San Francisco Estuary Institute EcoAtlas (San Francisco Estuary Institute, 2005).
3. Add the subset of State Water Quality Protection Areas to the beneficial use designation “Areas of Special Biological Significance” (ASBS).
4. Correct typographic and transcription errors in beneficial use designation tables (Appendix C).
 - Tables 2-1 through 2-7 in Chapter 2 of the 1995 Basin Plan list the water bodies of the Region and their formally designated beneficial uses, established in the 1975 Basin Plan.
 - The 1986 version of the Basin Plan had a single table for all water bodies in the Region.

- In 1995, the single table was reorganized into seven separate tables, according to the seven hydrologic units in the Region.
 - This Basin Plan amendment proposes to return to a single table organized first according to the watersheds of the seven hydrologic units and second according to the counties in which they are found.
 - The proposed changes correct drafting or transcription errors and are therefore not regulatory. These are referred to as “nunc pro tunc” changes. “Nunc pro tunc” literally means “now for then.” This phrase is used to express that an action is done at one time which ought to have been performed at an earlier time. For Basin Plan amendments, it is used to correct typographic, transcription, or drafting errors.
 - Renumber all subsequent tables in Chapter 2.
5. Update the basemaps with new boundaries for groundwater basins based on the recently published Department of Water Resources (DWR) “California’s Groundwater,” Bulletin 118 (DWR, 2003). The groundwater basin boundaries in the 1995 Basin Plan were based on DWR’s earlier version of Bulletin 118 published in 1980.
6. Add new groundwater basin boundary detail maps (Figures 10A-10D).
7. Update the existing and potential beneficial uses for groundwater basins based on the DWR “California’s Groundwater,” Bulletin 118 (DWR, 2003). The rationale for the beneficial use designation is as follows:
- Thirty-one groundwater basins were presented in the 1995 Basin Plan.
 - We reviewed the updated Bulletin 118 report and identified 28 basins and seven sub-basins in this Region. DWR revised some basin names and some basin numbers.
 - A table comparing the groundwater basin names and numbers in the two DWR reports (1980 and 2003) is provided in Appendix D.
 - Typographical errors in Tables 2-2 and 2-3 in the 1995 Basin Plan are also shown in Appendix D.
 - One basin, the Napa–Sonoma Volcanic Highlands groundwater basin (No. 2-23), was unintentionally omitted from the 1995 Basin Plan. Beneficial use designations for this basin will need to be evaluated in a regulatory Basin Plan Amendment.
 - Two adjoining groundwater basins that occupy Region 1 and Region 3 are partially located in this Region: the Wilson Grove Formation Highlands (No. 1.59) and the Gilroy Hollister Valley (No. 3-3.01) These two basins were

added to the Tables and Figures. A footnote has been added to the table of beneficial uses to refer the reader to the Basin Plans for Regions 1 and 3.

- The Groundwater Basin Characteristics presented in Table 2-2 of the 1995 Basin Plan has been deleted from this proposed amendment. The data for the areal extent, depth of the aquifer, storage capacity and perennial yield for the updated groundwater basins are generally available in the 2003 DWR report.
 - As shown in Appendix D, there are overlapping basin boundaries in San Francisco and San Mateo Counties. To accommodate these new basin boundaries and preserve the beneficial uses designated for the groundwater basins listed in the 1995 Basin Plan, we created subsets of groundwater basins for the purpose of assigning beneficial uses to the new basins, as follows:
 - The existing and potential beneficial uses for groundwater basins listed in the 1995 Basin Plan (Table 2-3) were assigned to the new groundwater basins based on the geographic location of the old basin compared to the new basin.
 - For example, the new Westside basin overlies four previously identified groundwater basins: San Francisco Sands, Merced Valley North, Merced Valley South, and the San Mateo Plain.
 - The beneficial uses listed in the 1995 Basin Plan for these four basins were assigned to the geographic area that is now the Westside basin. The Westside basin will be informally referred to as the “Westside A”, “Westside B”, etc., through Westside D in the proposed Basin Plan.
 - The new Islais Valley basin also overlies two former groundwater basins, the old Islais Valley and Merced Valley North. The Islais Valley basin will be informally referred to as “Islais Valley A” and “Islais Valley B”.
 - The South San Francisco basin incorporates the southern portion of the old Islais Valley basin and thereby assumes its beneficial uses.
8. Update the description of wetland beneficial uses and wetland mapping.
- Update the reference to the U.S. Fish and Wildlife Service’s National Wetlands Inventory (NWI).
 - Rename Table 2-10 listing beneficial uses of wetland areas to “Examples of Beneficial Uses in Selected Wetland Areas” because, as stated in existing Basin Plan text, it does not represent all the significant wetlands in the Region.

- Move Table 4-17 Existing and Potential Beneficial Uses of Wetlands from Chapter 4 to Chapter 2 because it shows how beneficial uses are associated with different wetland types. Change the title to “Examples of Existing and Potential Beneficial Uses of Wetland Types”.
- Update Figure 2-11 to include all general wetland areas in the Region. Add the reference for the wetland locations to the figure.
- Add the following references:
 - Baylands Ecosystem Habitat Goals Report (1999);
 - Baylands Ecosystem Species and Community Profiles (2000);
 - San Francisco Estuary Institute (SFEI)’s EcoAtlas Baylands Maps (San Francisco Estuary Institute, 2005a);
 - Bay Area Wetlands Project Tracker (also known as Wetlands Tracker, San Francisco Estuary Institute, 2005b); and
 - Wetlands Tracker managed by the San Francisco Bay Joint Venture (San Francisco Bay Joint Venture, 2005).

Chapter 3 Water Quality Objectives

9. Update Table 3-4 in response to comments from U.S. EPA and Balance Hydrologic identifying typographical errors related to the 2004 Basin Plan amendments.
10. Update the water quality objectives listed for domestic or municipal supply (MUN) in Table 3-5 to reflect recent changes in California Code of Regulations (CCR) Title 22, Division 4, Chapter 15 maximum contaminant levels (MCLs) and secondary maximum contaminant levels (SMCLs).

Chapter 4 Implementation

11. Update the description of the **Watershed Management Approach** to be consistent with components of the State Water Board’s Strategic Plan (State Water Board, 2001). Add the Water Board’s report titled Watershed Management Initiative, Integrated Plan Chapter (Water Board, 2004c).
12. Move the sections titled **Water Quality Attainment Strategies Including Total Maximum Daily Loads** and **Water Quality Attainment Strategy to Support Copper and Nickel Site-Specific Objectives South of the Dumbarton Bridge** to a new Chapter 7 to allow for expansion of other important TMDL discussions in the future.

13. Update the description of the **Watershed Management Planning** with individual watershed examples including a revised section for the Napa River Watershed, the Santa Clara Basin Watershed Management Initiative, the Tomales Bay Watershed Council, the Contra Costa Watershed Forum, and the forum's Watershed Atlas (Contra Costa County Community Development Department, 2003).
14. Update the description of **Treated Groundwater Discharge** requirements per the updated general National Pollutant Discharge Elimination System (NPDES) permits.
15. Update the description of **the South Bay Municipal Publicly Owned Treatment Works (POTWs)** to remove non-regulatory, historic descriptions.
16. Update Table 4-9 Publicly Owned Treatment Works Outfalls, Figure 4-1 Publicly Owned Treatment Works Outfalls, and Figure 4-2 Industrial Discharge Outfalls with current data.
17. Update the description of the **Livermore-Amador Valley** to incorporate the following elements:
 - Results of the 2004 Salt Management Plan prepared by Alameda County Flood Control and Water Conservation District (Zone 7 Water Agency, or Zone 7) and a technical advisory group (Alameda County Flood Control and Water Conservation District [Zone 7], 2004);
 - The water quality objectives in Table 3-7 for surface water and groundwater in Alameda Creek above Niles will need to be updated in a separate regulatory basin plan amendment. The current surface water quality objectives for the Alameda Creek Watershed above Niles (Table 3-7) were adopted in 1975. They were set based on historic SBA water quality primarily to prevent degradation by wastewater discharges of imported SBA water being conveyed and used for groundwater recharge during dry weather periods. Wastewater discharges were terminated in 1980. Background TDS concentrations in Arroyo de la Laguna can vary from near 200 mg/L at high flows (1,000 cubic feet per second (cfs)) to near 1,000 mg/L at low flows (10 cfs).
 - Updates to the Master Water Reuse Permit (Water Board Order No. 93-159); and
 - Add a description of the General Water Reuse Requirements for Municipal Wastewater and Water Agencies (Water Board Order No. 96-011).
18. Update the description of the **Pretreatment and Pollution Prevention** program to include the following elements:
 - California Water Code Section 13263.3 on pollution prevention programs;

- The Policy for Implementation of Toxic Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California (State Implementation Plan, or SIP), which addresses pollutant minimization programs (State Water Board, 2000); and
 - Water Board Resolution No. R2-2003-0096, “To Promote the Collaboration Between Bay Area Clean Water Agencies (BACWA) and the Water Board on Pollution Prevention Program Development and Excellence,” including a guidance document for pollution prevention program managers seeking to improve outreach and effectiveness of their programs, “Pollution Prevention Guidance and Tools for POTWs” (Pollution Prevention Steering Committee, 2005).
19. Update the description of **Water Recycling**, formerly water reclamation, to reflect recent changes in:
- Terminology - The term recycling is a standard term used by the recycling industry and reflects current practices. The term reclamation has a wider connotation than water recycling, including land reclamation and mine cleanup and restoration. Water reuse is used interchangeably with water recycling.
 - Water recycling criteria developed by the state Department of Health Services;
 - The Water Board’s General Water Reuse permit (Water Board Order No. 96-011); and
 - The report titled “Water Recycling 2030, Recommendations of California’s Recycled Water Task Force” prepared by the California Recycled Water Task Force (DWR Recycled Water Task Force, 2003).
20. Clarify the description of **Onsite Wastewater Treatment and Dispersal Systems**, formerly On-site Wastewater Treatment and Disposal Systems.
- Terminology – The term dispersal is a standard term used by the onsite wastewater industry and reflects current practices;
 - Update the description of alternative onsite systems; and
 - Update the description of graywater systems with the 1997 California Graywater Standards that were incorporated into the California Water Code.
21. Update the description of **Mines and Mineral Producers** to include the San Francisco Bay Mines Report (Water Board, 1998).
22. Update the description of **Wetland Protection and Management** to include a discussion of the following references:

- Baylands Ecosystem Habitat Goals Report (Goals Report, 1999);
- Baylands Ecosystem Species and Community Profiles (Goals Report, 2000);
- National Wetlands Inventory (NWI);
- Wetland Ecological Assessment (WEA) (Breux et al., 2005); and
- California Rapid Assessment Method (CRAM) (Collins et al., in press).

23. Update the section on **Groundwater Protection and Management** to include the following new items:

- Updated description of policies and regulation required for site investigation, cleanup and site closure in a new section titled **Requirements for Site Investigation, Cleanup, and Site Closure**.
- Add a list of tasks that should be conducted to complete site investigation, cleanup, and closure in a new section titled **Elements of Groundwater Cleanup and Site Closure**, including electronic reporting, public participation, risk management, and liability relief tools.
- Updated description of **Setting Cleanup Levels** to include a description of environmental screening levels (ESLs). ESL references include:
 - Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater (Water Board, 2005); and
 - Use of California Human Health Screening Levels in Evaluation of Contaminated Properties (Cal/EPA, 2005).
 - Delete the use of 1 part per million (ppm) for total volatile organic compounds (VOCs) and 10 ppm for total semi-VOCs in the unsaturated zone for soil cleanup levels. These criteria were based on soil modeling results at a Superfund site in the Region and the professional judgment of Water Board staff in the early 1990s. The Water Board currently uses site-specific cleanup levels developed for individual chemicals at each site, as described in the updated description of **Setting Cleanup Levels**.
 - Delete the description of the **Non-Attainment of Groundwater Cleanup Levels**. Since 1995, the State Water Board developed a statewide policy on groundwater and soil cleanup and amended State Board Resolution 92-49 to address non-attainment of groundwater cleanup levels.
- Delete the description of **Cleanup of Polluted Sites** by creating the new section titled **Requirements for Site Investigation, Cleanup, and Site Closure** and by moving the description of **Landfill Program** and **Shallow**

Wells to Program Areas and Groundwater Protection Studies, respectively.

- Updated the description of **Program Areas** including these new elements:
 - Addition of Brownfield regulations to the **Spills, Leaks, Investigations, and Cleanup Program (SLIC)** program;
 - Recent changes in the **Underground Storage Tank Program**, including the following new references:
 - Recommendations to Improve the Cleanup Process for California's Leaking Underground Fuel Tanks (LUFTs) (commonly referred to as the "Livermore Report") (LLNL, 1995);
 - Standard Guide for Risk-Based Corrective Action Applied at Petroleum Release Sites (ASTM, 2002);
 - Expedited Site Assessment Tools for UST Sites (U.S. EPA, 1997);
 - An Evaluation of Methyl Tert-Butyl Ether (MTBE) Impacts to California Groundwater Resources (LLNL, 1998);
 - Guidelines for Investigation and Cleanup of MtBE and Other Ether-Based Oxygenates (State Water Board, 2001b); and
 - Report on MtBE Monitoring at Operating UST Facilities in Santa Clara County (Water Board, 2004b).
 - An updated description of California Code of Regulations Title 27 landfill regulations in the **Landfill Program**, formerly Hazardous and Nonhazardous Waste Disposal, including a an updated figure with landfill locations and the status of each site; and delete the following out-of-date descriptions:
 - Solid Waste Assessment Tests (SWAT) - This program has been completed.
 - Landfill Expansions – This discussion is no longer relevant in terms of permitting new landfills. Regulatory knowledge and updated landfill regulations preclude siting in sensitive areas, provide for much better containment, and have increased capacity at existing landfills.
 - An updated description of the **Department of Defense and Department of Energy** program, including a new figure showing the locations of these sites in our Region.
- Delete the section **Progress of the Water Board's Groundwater Programs**. This section is out-of-date and more current information is available on the Water Board's website.

- Update the description of **Groundwater Protection Studies** to include the following reports:
 - The Napa River Watershed (Water Board, 1996a);
 - The San Francisco and Northern San Mateo Counties (Water Board 1996b);
 - The East Bay Plain, Alameda and Contra Costa Counties (Water Board, 1999); and
 - The South San Francisco Bay Basin, Alameda, San Mateo, and Santa Clara Counties (Water Board, 2003a).
 - Delete Table 4-19 **Options for Future Management Strategies at Groundwater Cleanup Sites**. The information contained in Table 4-19 was intended as a planning tool for developing groundwater management strategies in the Region. The revised section titled **Requirements for Site Investigation, Cleanup, and Site Closure** has clarified the Water Board's strategy for groundwater cleanup.
24. Update the description of **Emerging Program Areas** to include recent developments in wetland restoration, desalination, emerging toxic pollutants of concern, groundwater protection issues, sediment, the National "Portfield" Initiative, and hydromodification, including reference to Water Board staff's technical reference circular titled "A Primer on Stream and River Protection for the Regulator and Program Manager" (Water Board, 2003b).

Chapter 5 Plans and Policies

25. Update the description of **Plans and Policies** to include State and Regional Water Board policies adopted since 1995.

Chapter 6 Surveillance and Monitoring

26. Update the description of the **Regional Monitoring Program** with more recent program objectives; including a new figure showing updated sampling locations and a new table of sampling parameters.
27. Add a new section titled **Surface Water Ambient Monitoring Program (SWAMP)**. This section also updates the former State Mussel Watch and Toxic Substance Monitoring programs.

28. Update the description of the **Groundwater Monitoring Networks**, including monitoring conducted by the Department of Pesticide Regulation and the Groundwater Ambient Monitoring and Assessment (GAMA) program.

New Chapter 7 Water Quality Attainment Strategies Including Total Maximum Daily Loads

29. Create an entirely new chapter titled **Water Quality Attainment Strategies Including Total Maximum Daily Loads**. The first section of this chapter contains the **Water Quality Attainment Strategy to Support Copper and Nickel Site-Specific Objectives South of the Dumbarton Bridge**, which was amended to the Basin Plan in January 2005.

SCHEDULE

To formally adopt this Basin Plan Amendment, the Water Board needs to adopt a resolution approving it. The following items are included in the Water Board package for review and approval:

- ✓ Staff Summary Report containing with a brief description of the amendment;
- ✓ Appendix A - A tentative resolution for the adoption of the 2005 Basin Plan General Update with Non-Regulatory Revisions, including Exhibit A Basin Plan Amendment (underline-strikeout version);
- ✓ Appendix B – This staff report, describing the purpose and scope of the proposed Basin Plan amendment, including the “clean” final version of the proposed changes to the text, tables, and figures;
- ✓ Appendix C – A copy of the Public Notice dated August 12, 2005;
- ✓ Appendix D – Comments received from the public on this proposed Basin Plan amendment; and
- ✓ Appendix E – Water Board staff responses to the comments from the public on this proposed Basin Plan amendment.

A public hearing on this proposed Basin Plan amendment will be held October 19, 2005. At the hearing, the tentative resolution may be revised to reflect the public comment and Water Board direction, and the Water Board may act on the proposal.

If the resolution is approved, the proposed Basin Plan Amendment will be sent to the State Water Board and the Office of Administrative Law (OAL) for review and approval, expected to take two to six months, depending on their schedules. Although OAL does not approve non-regulatory changes, OAL must review the proposal and concur that the proposed changes are non-regulatory.

REFERENCES

Alameda County Flood Control and Water Conservation District (Zone 7), 2004. Livermore-Amador Valley Main Groundwater Basin Salt Management Plan, May.

American Society of Testing Materials (ASTM), 2002. Standard Guide to Risk-Based Corrective Action Applied to Petroleum Release Sites, E1739-95.

Breaux, A., S.Cochrane, J.Evens, M.Martindale, B.Pavlik, L.Suer, D.Benner, 2005. Wetland ecological and compliance assessments in the San Francisco Bay Region, CA., U.S.A.; Journal of Environmental Management 74(2005) 217-237.

California Environmental Protection Agency (Cal/EPA), 2005. Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties, January.

Calwater, 1999. California Interagency Watershed Map of 1999 (CalWater 2.2.1). <http://cain.nbii.gov/calwater/>.

Collins, J., Sutula, M., Stein, E., In press. California Rapid Assessment Method for Wetlands, Journal of the American Water Resources Association.

Contra Costa County Community Development Department, 2003. Contra Costa County Watershed Atlas. Prepared in cooperation with the Contra Costa County Public Works Department under the direction of the Contra Costa County Board of Supervisors. Project conceived by the Contra Costa Watershed Forum. www.cocowaterweb.org.

Department of Water Resources (DWR), 2003. California's Groundwater, Bulletin 118, October.

DWR Recycled Water Task Force, 2003. Water Recycling 2030 - Recommendations of California's Recycled Water Task Force, June.

Goals Project, 1999. Baylands Ecosystem Habitat Goals. A report of habitat recommendations prepared by the San Francisco Bay Area Wetlands Ecosystem Goals Project. U.S. Environmental Protection Agency, San Francisco, Calif./San Francisco Bay Regional Water Quality Control Board, Oakland, Calif.

Goals Project, 2000. Baylands Ecosystem Species and Community Profiles: Life histories and environmental requirements of key plants, fish and wildlife. Prepared by the San Francisco Bay Area Wetlands Ecosystem Goals Project. P.R. Olofson, editor. U.S. Environmental Protection Agency, San Francisco, Calif./San Francisco Bay Regional Water Quality Control Board, Oakland, Calif.

Lawrence Livermore National Laboratory (LLNL), 1998. An Evaluation of MTBE Impacts to California Groundwater Resources. Prepared for California State Water Resources Control Board, Department of Energy, and Western States Petroleum Association, June 11.

LLNL, 1995. Recommendations to Improve the Cleanup Process for California's Leaking Underground Fuel Tanks (LUFTs). Prepared for the California State Water Resources Control Board and the Senate Bill 1764 Leaking Underground Fuel Tank Advisory Committee, October 16.

Oakland Museum of California (Oakland Museum), 1993. Creek and Watershed Map of Oakland and Berkeley. Janet Sowers.

Oakland Museum, 1999. Creek and Watershed Map of Fremont and Vicinity. Janet Sowers.

Oakland Museum, 2003. Creek and Watershed Map of the Pleasanton and Dublin Area. Janet Sowers and Christopher Richard.

Oakland Museum, 2004. Creek and Watershed Map of Palo Alto and Vicinity. Janet Sowers.

Oakland Museum of California, 2005. Creek and Watershed Map of Milpitas and North San Jose. Janet Sowers and Stephen Thompson.

Pollution Prevention Steering Committee, 2005, Pollution Prevention Guidance and Tools for POTWs. Prepared by the Bay Area Clean Water Agencies, the Bay Area Pollution Prevention Group, and the San Francisco Bay Regional Water Quality Control Board, April.

San Francisco Bay Joint Venture, 2005. California Joint Venture Project Tracking System, www.cjvp.ducks.org.

San Francisco Bay Regional Water Quality Control Board (Water Board), 1996a. Groundwater Protection Strategy for the Napa River Watershed - A Geographic Information System Demonstration Project, Prepared by the Groundwater Committee, April.

Water Board, 1996b. San Francisco and Northern San Mateo County Pilot Beneficial Use Designation Project. Prepared by the Groundwater Committee, April.

Water Board, 1998. Mines Report. Prepared by Terry Seward, April.

Water Board, 1999. East Bay Plain Groundwater Basin Beneficial Use Evaluation Report - Alameda and Contra Costa Counties, California. Prepared by the Groundwater Committee, June.

Water Board, 2003a. A Comprehensive Groundwater Protection Evaluation for the South San Francisco Bay Basins. Prepared by the Groundwater Committee, May.

Water Board, 2003b. A Primer on Stream and River Protection for the Regulator and Program Manager, Technical Reference Circular W.D. 02 - #1, April.

Water Board, 2004a. A Triennial Review of the San Francisco Bay Basin Water Quality Control Plan (Basin Plan), November 17.

Water Board, 2004b. Report on MTBE Monitoring at Operating UST Facilities in Santa Clara County, November 15.

Water Board, 2004c. Watershed Management Initiative Integrated Plan Chapter, October.

Water Board, 2005. Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, February.

San Francisco Estuary Institute (SFEI), 2005a. The San Francisco Bay Area EcoAtlas, www.sfei.org.

San Francisco Estuary Institute (SFEI), 2005b. Wetlands Project Tracker, www.wrmp.org.

State Water Resources Control Board (State Water Board), 2000. The Policy for Implementation of Toxic Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California (State Implementation Plan, SIP). Phase I of the Inland Surface Waters Plan and the Enclosed Bays and Estuaries Plan.

State Water Board, 2001a. Strategic Plan - A Vision for the Future, November.

State Water Board, 2001b. Guidelines for Investigation and Cleanup of MTBE and Other Ether-Based Oxygenates, January 22.

U.S. Environmental Protection Agency (U.S. EPA), 1997. Expedited Site Assessment Tools for Underground Storage Tank Sites: A Guide for Regulators, EPA 510-B-97-001, March.

Staff Report

APPENDIX A

Amended Basin Plan

**2005 Basin Plan General Update
With Non-regulatory Revisions**

The final clean copies of the amended Basin Plan are available electronically on the Water Board's website at www.waterboards.ca.gov.sanfranciscobay or in hard copy by request (510-622-2300).

Staff Report

APPENDIX B

**Triennial Review
Prioritized List of Basin Plan Issues for Investigation**

APPENDIX B of the Staff Report

2004 PRIORITIZED BASIN PLAN TRIENNIAL REVIEW ISSUE LIST

ISSUE TITLE	Basin Plan Maps
PRIORITIZED RANK	1
CATEGORY	Beneficial Uses
GENERALIZED RANK	HIGH
COMPLEXITY	LOW
SCORE	60
ISSUE NAME	Update of Basin Plan Maps
ISSUE SUMMARY	Update the Basin Plan maps (Figures 2-1 through 2-11) incorporating new hydrologic boundaries, stream linework, and geographic information. Update beneficial uses and water bodies according to the newly revised maps. Reconcile nomenclature in the beneficial use tables for surface and ground water with the nomenclature on the Basin Maps. Re-format Maps in Chapter 4 for consistency and any relevant updates. Beneficial Use Tables 2-1 through 2-7 for surface waters should include the designations for Hydrologic Unit (HU), Hydrologic Area (HA), or Hydrologic Subarea (HSA). Beneficial Use Table 2-8 for ground waters should include the updated DWR Bulletin 118 basin numbers. These conventions should reconcile the water body classifications with the Calwater System and provide updates to that statewide system as appropriate (e.g., in flat, urbanized portions of the region based on local information).
ESTIMATED PERSONNEL-YEARS (PY)	0.3
PY RUNNING TOTAL	0.3
IMPLEMENTING DIVISION	Planning and TMDL
PROPOSED BY:	Water Board
SUPPORTED BY:	

ISSUE TITLE	Electronic and Web Accessible Basin Plan
PRIORITIZED RANK	2
CATEGORY	ALL
GENERALIZED RANK	HIGH
COMPLEXITY	LOW
SCORE	56
ISSUE NAME	Electronic and Web Accessible Basin Plan
ISSUE SUMMARY	Important administrative task to make the most current form of the Basin Plan, including fully approved amendments since 1995, available on the Water Board's website in PDF and HTML format. Prepare a Microsoft WORD document of the Basin Plan as a template for Basin Plan amendment work. This will greatly improve public access to the applicable and relevant regulations of the Basin Plan.
ESTIMATED PERSONNEL-YEARS (PY)	0.3
PY RUNNING TOTAL	0.6
IMPLEMENTING DIVISION	ALL
PROPOSED BY:	Water Board
SUPPORTED BY:	

ISSUE TITLE	CTR footnote b followup
PRIORITIZED RANK	3
CATEGORY	Water Quality Objectives
GENERALIZED RANK	HIGH
COMPLEXITY	LOW
SCORE	54
ISSUE NAME	Amend Tables 3-3 and 3-4 to recognize the California Toxics Rule (CTR) as the basis of water quality objectives
ISSUE SUMMARY	Water Board staff propose that, upon final promulgation of an update to the CTR that removes footnote “b,” the Water Board remove (vacate) the CTR-based numbers in the Basin Plan tables 3-3 and 3-4, thereby recognizing that the federal CTR is the basis of the water quality objectives and not the Basin Plan. This will create consistency in water quality objectives for toxic pollutants in this region, promote statewide consistency and reduce confusion and inefficiency in later years if and when the CTR is modified.
ESTIMATED PERSONNEL-YEARS (PY)	0.3
PY RUNNING TOTAL	0.9
IMPLEMENTING DIVISION	NPDES, Planning and TMDL
PROPOSED BY:	Water Board
SUPPORTED BY:	

ISSUE TITLE	Alternate Effluent Limits for Bacteria
PRIORITIZED RANK	4
CATEGORY	Implementation
GENERALIZED RANK	HIGH
COMPLEXITY	MEDIUM
SCORE	52
ISSUE NAME	Procedure for establishing Fecal Coliform or other bacterial effluent limitations in lieu of Total Coliform
ISSUE SUMMARY	The NPDES division has instituted procedures to allow a discharger to receive a fecal coliform-based or enterococci-based limit in lieu of a total coliform limit. It includes an experimental period where chemical uses are changed to meet a fecal coliform-based or enterococci-based limit and receiving waters are surveyed to ensure compliance with bacteria water quality objectives where the beneficial use of water contact recreation occurs. An alternate procedure has been to establish fecal coliform or enterococci limits in the discharge that are equivalent to the objectives. A Basin Plan Amendment would fine tune these procedures based on experience with dischargers such as San Francisco Southeast Water Pollution Control Plant, and formalize them for use by other municipal dischargers in the region.
ESTIMATED PERSONNEL-YEARS (PY)	0.6
PY RUNNING TOTAL	1.5
IMPLEMENTING DIVISION	NPDES, Planning and TMDL
PROPOSED BY:	Water Board
SUPPORTED BY:	San Francisco Public Utilities Commission Central Contra Costa Sanitary District City of Sunnyvale

ISSUE TITLE	Groundwater editorial changes
PRIORITIZED RANK	5
CATEGORY	Implementation
GENERALIZED RANK	HIGH
COMPLEXITY	LOW
SCORE	51
ISSUE NAME	Groundwater: Editorial revisions and minor clarifications or corrections to text and reference to new laws, plans and regulations
ISSUE SUMMARY	Make editorial changes that clarify or update regulatory program descriptions to be consistent with new laws, plans and regulations. These changes are sometimes needed for clarity and to ensure that the public is informed about the latest requirements to protect water quality. Such proposed elements of Basin Plan Amendments would be non-regulatory, i.e., they would not impose new requirements on permittees, but rather clarify existing regulatory requirements or program descriptions not addressed in the current version of the Basin Plan.
ESTIMATED PERSONNEL-YEARS (PY)	0.3
PY RUNNING TOTAL	1.8
IMPLEMENTING DIVISION	Toxic Cleanup, Groundwater Protection & Waste Containment
PROPOSED BY:	Water Board
SUPPORTED BY:	Bay Planning Coalition Bay Area Stormwater Management Agencies Association

ISSUE TITLE	Copper SSO
PRIORITIZED RANK	6
CATEGORY	Water Quality Objectives
GENERALIZED RANK	HIGH
COMPLEXITY	MEDIUM
SCORE	49
ISSUE NAME	Copper Site-Specific Objective (Marine), San Francisco Bay Segments North of the Dumbarton Bridge
ISSUE SUMMARY	Currently, the California Toxics Rule provides the basis for the marine water quality objective for copper in this region, 3.1 ug/l (chronic, or 4-day average) multiplied by a default water effect ratio (WER) of 1.0. This objective is used to derive effluent limits, and several dischargers are unable to comply with the derived limits. It is also used to determine whether the Bay is impaired due to copper. Available data from San Francisco Bay indicates that site waters exert a WER greater than 1.0, meaning that the waters have a consistent binding capacity for copper that renders some of the dissolved copper non-toxic. The Water Board established a site-specific objective of 6.9 ug/l (chronic, marine) south of Dumbarton Bridge based on WER data from that portion of the region. A similar methodology can be employed north of Dumbarton Bridge that uses representative WER data that has been collected in cooperation with the dischargers.
ESTIMATED PERSONNEL-YEARS (PY)	0.6
PY RUNNING TOTAL	2.4
IMPLEMENTING DIVISION	NPDES, Planning & TMDL
PROPOSED BY:	Water Board
SUPPORTED BY:	Central Contra Costa Sanitary District City of San Jose City of Sunnyvale Sonoma County Water Agency Bay Planning Coalition

ISSUE TITLE	Groundwater South Bay prioritization
PRIORITIZED RANK	6
CATEGORY	Implementation
GENERALIZED RANK	HIGH
COMPLEXITY	MEDIUM
SCORE	49
ISSUE NAME	A policy for prioritizing groundwater pollution sites in the South Bay Basins
ISSUE SUMMARY	With very limited exceptions, all groundwater in the South Bay serves as a significant drinking water resource. Public water supply wells serve half the drinking water supply to residents in these basins. However, there are areas within the South Bay Basins that are more vulnerable and/or critical in terms of groundwater protection. Thus it is possible to prioritize areas for groundwater protection. High priority areas are those where unconfined aquifers are potentially in direct contact with pollutants. Medium priority areas are more protected from pollutants due to the presence of an aquitard that retards or inhibits pollutant migration. Low priority areas are located in fine-grained sediments, low yielding aquifers and have extremely flat horizontal gradients.
ESTIMATED PERSONNEL-YEARS (PY)	0.6
PY RUNNING TOTAL	3.0
IMPLEMENTING DIVISION	Toxic Cleanup, Groundwater Protection & Waste Containment
PROPOSED BY:	Water Board
SUPPORTED BY:	

ISSUE TITLE	Water Body, Beneficial Use Update
PRIORITIZED RANK	6
CATEGORY	Beneficial Uses
GENERALIZED RANK	HIGH
COMPLEXITY	MEDIUM
SCORE	49
ISSUE NAME	Update of significant Water Bodies and associated Beneficial Uses with readily available documentation
ISSUE SUMMARY	A number of the Region's water bodies with substantial public interest are not specifically identified in the Plan's water body list and need to be added and appropriate beneficial uses designated where they have existed after November 1975. There are also some errors in the 1995 update's designated uses that can be corrected. For instance, the sport fishing beneficial use is not designated for some of the Region's water bodies where California Dept. of Fish and Game issues fishing licenses. Basin Plan maps can be concurrently updated using in-house GIS resources. The COMM use (which includes sport fishing and consumption of organisms) should be re-defined for consistency with the Statewide definition, which includes freshwaters.
ESTIMATED PERSONNEL-YEARS (PY)	1.2
PY RUNNING TOTAL	4.2
IMPLEMENTING DIVISION	Watershed, Planning & TMDL
PROPOSED BY:	Water Board
SUPPORTED BY:	Bay Planning Coalition CLEAN South Bay Citizens Committee to Complete the Refuge Carin High Genny Smith Libby Lucas U.S. EPA, Region IX Friends of Five Creeks

ISSUE TITLE	Water Conservation and Recycling
PRIORITIZED RANK	9
CATEGORY	Implementation
GENERALIZED RANK	HIGH
COMPLEXITY	LOW
SCORE	48
ISSUE NAME	Update sections on Water Conservation and Water Recycling
ISSUE SUMMARY	Update sections on water conservation and recycling to encourage more dischargers to pursue these important projects.
ESTIMATED PERSONNEL-YEARS (PY)	0.3
PY RUNNING TOTAL	4.5
IMPLEMENTING DIVISION	Watershed, Planning and TMDL, NPDES
PROPOSED BY:	City of San Jose
SUPPORTED BY:	City of Sunnyvale Sonoma County Water Agency

ISSUE TITLE	Stream Protection Policy
PRIORITIZED RANK	9
CATEGORY	Implementation
GENERALIZED RANK	HIGH
COMPLEXITY	HIGH
SCORE	48
ISSUE NAME	Incorporate explicit policy on stream protection into Clean Water Act (CWA) Section 401 water quality certification and stormwater NPDES regulatory programs
ISSUE SUMMARY	The Water Board has two regulatory programs where it must consider the effects of programs or projects on the physical characteristics of streams in determining whether water quality standards are achieved. For projects that require a U.S. Army Corps of Engineers (USACE) CWA Section 404 permit for fill or excavation, the Water Board is responsible for issuing the State's CWA Section 401 water quality certification. The Water Board also regulates local jurisdictions through its NPDES permits for discharges of urban runoff. Stream protection and management policies adopted in a Basin Plan Amendment would be implemented in existing elements of these programs, encouraging local jurisdictions to not only continue urban runoff pollution prevention, but also to protect and enhance the abilities of the water bodies in their jurisdictions to assimilate and/or remove pollutants through the water bodies' natural stream and wetland functions.
ESTIMATED PERSONNEL-YEARS (PY)	1.5
PY RUNNING TOTAL	6.0
IMPLEMENTING DIVISION	Watershed
PROPOSED BY:	Water Board
SUPPORTED BY:	Bay Planning Coalition CLEAN South Bay Citizens Committee to Complete the Refuge Carin High Genny Smith Libby Lucas Napa-Solano Audubon Society U.S. EPA, Region IX

ISSUE TITLE	Stream and Wetland Protection Beneficial Uses
PRIORITIZED RANK	9
CATEGORY	Implementation
GENERALIZED RANK	HIGH
COMPLEXITY	HIGH
SCORE	48
ISSUE NAME	Designation of Beneficial Uses related to physical stream and wetland functions that improve water quality
ISSUE SUMMARY	<p>The proposed stream protection amendment would designate two beneficial uses of streams and wetlands, water quality enhancement (WQE) and flood peak attenuation/flood water storage (FLD). These beneficial uses explicitly recognize that physical characteristics of water bodies contribute to better water quality, and that these physical characteristics need to be protected in the Board's permitting programs in order to achieve the Board's mission of protecting all beneficial uses of the Region's water bodies. The Lahontan Regional Water Board adopted these two beneficial uses in its Basin Plan in the early 1990's, and they allow a linkage between the physical functions of water bodies and water quality.</p> <p>Since this Triennial Review was initiated, the Basin Plan Roundtable has taken up the issue of the need for statewide consistency in wetland and water quality enhancement beneficial uses. Other regions have adopted a different suite of these uses than the Lahontan Board. For the time being, we will postpone action until consistent wetland beneficial uses are defined at statewide level in the Roundtable.</p>
ESTIMATED PERSONNEL-YEARS (PY)	1.5
PY RUNNING TOTAL	7.5
IMPLEMENTING DIVISION	Watershed, Planning and TMDL
PROPOSED BY:	Water Board
SUPPORTED BY:	<p>Bay Planning Coalition CLEAN South Bay Citizens Committee to Complete the Refuge Carin High Genny Smith Libby Lucas Napa-Solano Audubon Society U.S. EPA, Region IX</p>

ISSUE TITLE	Nickel SSO
PRIORITIZED RANK	12
CATEGORY	Water Quality Objectives
GENERALIZED RANK	MEDIUM
COMPLEXITY	MEDIUM
SCORE	47
ISSUE NAME	Nickel Site-Specific Objective (Marine), San Francisco Bay Segments North of the Dumbarton Bridge
ISSUE SUMMARY	The 1986 Basin Plan saltwater, total-recoverable objective for Nickel is in the process of being updated to the CTR value of 8.2 ug/l dissolved (estimated to be in effect in Fall of 2004). Impaired water body listings triggered by the older number are expected to be delisted based on use of the statewide CTR criteria. South of the Dumbarton Bridge, the Bay's marine water quality objective for nickel is a Site-specific objective of 11.9 ug/l, based on a recalculation of the national criteria using more recent toxicity data. The regulated community has requested that the Water Board use the same recalculation method for the entire San Francisco Bay Estuary as was done to establish the Site-specific objective in the segment south of the Dumbarton Bridge.
ESTIMATED PERSONNEL-YEARS (PY)	0.6
PY RUNNING TOTAL	8.1
IMPLEMENTING DIVISION	NPDES, Planning and TMDL
PROPOSED BY:	Water Board
SUPPORTED BY:	Central Contra Costa Sanitary District City of San Jose City of Sunnyvale Sonoma County Water Agency Bay Planning Coalition

ISSUE TITLE	NPDES editorial changes
PRIORITIZED RANK	13
CATEGORY	Implementation, Plans and Policies
GENERALIZED RANK	MEDIUM
COMPLEXITY	LOW
SCORE	46
ISSUE NAME	NPDES: Editorial revisions and minor clarifications (e.g., pollution prevention, chronic toxicity, court rulings and State Water Board actions)
ISSUE SUMMARY	<p>Make editorial changes that clarify or update NPDES regulatory program descriptions to be consistent with new laws, plans and regulations. The Effluent Toxicity Characterization Program was initiated in 1986, and the program description needs to be updated. Table 4-5 (Critical Life Stage Toxicity Test Species and Protocols) should be updated to be consistent with the State Board's California Ocean Plan (1997). Since the Basin Plan language was drafted on pollution prevention in 1995, the program has evolved. Also, the SIP has provisions for pollution prevention, and there is language in SB709, which established mandatory minimum penalties for effluent limit violations. There is a need to review and update the program description, and evaluate consistency between the Basin Plan, the SIP, and SB709, especially for any regulatory requirements. Many permitting decisions are made based on rulings (Orders) from the State Board in response to petitions of Water Board permitting actions. Other decisions are made based on court rulings on appeals of these State Board permit petition rulings. Important State Board and court rulings affecting permitting should be referenced in Chapter 5, Plans and Policies.</p>
ESTIMATED PERSONNEL-YEARS (PY)	0.3
PY RUNNING TOTAL	8.4
IMPLEMENTING DIVISION	NPDES
PROPOSED BY:	Water Board
SUPPORTED BY:	<p>Bay Planning Coalition Bay Area Stormwater Management Agencies Association City of Sunnyvale City of San Jose U.S. EPA, Region IX</p>

ISSUE TITLE	Watershed editorial changes
PRIORITIZED RANK	13
CATEGORY	Implementation, Plans and Policies
GENERALIZED RANK	MEDIUM
COMPLEXITY	LOW
SCORE	46
ISSUE NAME	Watershed: Editorial revisions and minor clarifications or corrections to text and reference to new laws, plans and regulations
ISSUE SUMMARY	Make editorial changes that clarify or update Watershed regulatory program descriptions to be consistent with new laws, plans and regulations. These changes are sometimes needed for clarity and to ensure that the public is informed about the latest requirements to protect water quality. Such proposed elements of Basin Plan Amendments would be non-regulatory, that is, they would not impose new requirements on permittees, but rather clarify existing regulatory requirements or program descriptions not addressed in the current version of the Basin Plan. Since the Basin Plan language was drafted on watershed management in 1995, the program has evolved, including several annual updates of the Watershed Management Initiative Chapter and a Grant administration program that can be incorporated into the Basin Plan for better transparency.
ESTIMATED PERSONNEL-YEARS (PY)	0.3
PY RUNNING TOTAL	8.7
IMPLEMENTING DIVISION	Watershed
PROPOSED BY:	Water Board
SUPPORTED BY:	Bay Planning Coalition Bay Area Stormwater Management Agencies Association U.S. EPA, Region IX

ISSUE TITLE	Onsite Wastewater Systems Update
PRIORITIZED RANK	13
CATEGORY	Implementation
GENERALIZED RANK	MEDIUM
COMPLEXITY	LOW
SCORE	46
ISSUE NAME	Onsite Wastewater Systems Update
ISSUE SUMMARY	Add newly promulgated regulations pertaining to onsite sewage treatment systems to the Basin Plan pursuant to California Water Code Section 13291(e). The amendment would update Chapter 4 regarding regulation of on-site wastewater treatment and dispersal systems. The amendment would include prescriptive and performance standards for the design, operation, and monitoring of these systems, and requirements for local government agency programs involved in regulation of these systems pursuant to conditional waivers from the Board.
ESTIMATED PERSONNEL-YEARS (PY)	0.3
PY RUNNING TOTAL	9.0
IMPLEMENTING DIVISION	Watershed
PROPOSED BY:	Water Board
SUPPORTED BY:	

ISSUE TITLE	ESL Process
PRIORITIZED RANK	16
CATEGORY	Implementation
GENERALIZED RANK	MEDIUM
COMPLEXITY	MEDIUM
SCORE	45
ISSUE NAME	Process to determine appropriate site cleanup levels using environmental screening levels (ESLs)
ISSUE SUMMARY	A description of the tiered-decision process used to determine relevant exposure pathways and appropriate site cleanup levels using environmental screening levels (ESLs). The decision process expands the existing protection of groundwater beneficial uses to include potential risk to human health from indoor air exposure and protection of aquatic receptors.
ESTIMATED PERSONNEL-YEARS (PY)	0.9
PY RUNNING TOTAL	9.9
IMPLEMENTING DIVISION	Toxic Cleanup, Groundwater Protection & Waste Containment
PROPOSED BY:	Water Board
SUPPORTED BY:	

ISSUE TITLE	Adopt Narrative Biocriteria
PRIORITIZED RANK	17
CATEGORY	Water Quality Objectives
GENERALIZED RANK	MEDIUM
COMPLEXITY	HIGH
SCORE	44
ISSUE NAME	Adopt Narrative Biocriteria
ISSUE SUMMARY	In the 2003 memorandum of understanding between State Board and U.S. EPA, Biocriteria is a statewide planning priority. The first phase of the program is the development of narrative biological criteria. These are essentially Statements of intent incorporated into State water regulations to formally consider the fate and status of aquatic biological communities. Biological criteria are officially defined as "...numerical values or narrative expressions that describe the reference biological integrity of aquatic communities inhabiting waters of a given designated aquatic life use." (U.S. EPA, 1990) The narrative objective should establish a reasonable expectation of the achievable water resource quality for the Region. Consistent with antidegradation requirements, the best existing conditions achieved since 1975 [40 CFR 131.3(c) and 131.12(a)(1)] must be the lowest acceptable status for interim consideration while planning, managing, and regulating to meet a higher criteria. This project would probably entail proposing tiered aquatic life uses for inland surface waters, as has been done in other States, based on data from the Board's Surface Water Ambient Monitoring Program and other partner organizations.
ESTIMATED PERSONNEL-YEARS (PY)	1.5
PY RUNNING TOTAL	11.4
IMPLEMENTING DIVISION	Planning and TMDL
PROPOSED BY:	Water Board
SUPPORTED BY:	U.S. EPA, Region IX

ISSUE TITLE	Cyanide SSO
PRIORITIZED RANK	18
CATEGORY	Water Quality Objectives
GENERALIZED RANK	MEDIUM
COMPLEXITY	MEDIUM
SCORE	42
ISSUE NAME	Cyanide Site-Specific Objective (Marine), San Francisco Bay Segments
ISSUE SUMMARY	Cyanide has become an NPDES permit compliance issue for municipal and industrial dischargers in the San Francisco Bay Region. A first step in this effort is to update the current U.S. EPA cyanide criterion to incorporate the most recent, and scientifically defensible toxicity data. The CTR marine cyanide acute and chronic criteria are both 1.0 ug/l. These were derived in 1985 using the minimum data set allowed by the U.S. EPA Guidelines (acute toxicity data for eight genera, chronic data for 5 freshwater and two saltwater species). The updated criteria have already been adopted by the State of Washington for Puget Sound and we are proposing to adopt the same number, 2.9 ug/l, for San Francisco Bay.
ESTIMATED PERSONNEL-YEARS (PY)	0.6
PY RUNNING TOTAL	12.0
IMPLEMENTING DIVISION	NPDES, Planning and TMDL
PROPOSED BY:	Water Board
SUPPORTED BY:	Bay Planning Coalition Central Contra Costa Sanitary District City of San Jose City of Sunnyvale Sonoma County Water Agency

ISSUE TITLE	Reasonable Potential Policy
PRIORITIZED RANK	19
CATEGORY	Implementation
GENERALIZED RANK	MEDIUM
COMPLEXITY	HIGH
SCORE	40
ISSUE NAME	Procedures for Reasonable Potential Analysis: metals translators, hardness, number of years of data, selection of background concentration
ISSUE SUMMARY	The State Implementation Policy (SIP) for toxic pollutant objectives gives discretion to Regional Water Boards regarding selection of elements to use in determination of whether effluent limits are warranted for a given pollutant ("Reasonable Potential Analysis"). There are a number of decisions that permit authors must make, such as the appropriate metals translators and how to set up a study, the representative hardness value for receiving waters, and the representative background concentrations of a given pollutant for a given discharge, and number of years of data used in the Reasonable Potential Analysis.
ESTIMATED PERSONNEL-YEARS (PY)	1.5
PY RUNNING TOTAL	13.5
IMPLEMENTING DIVISION	NPDES
PROPOSED BY:	Water Board
SUPPORTED BY:	City of San Jose City of Sunnyvale Sonoma County Water Agency

ISSUE TITLE	Cyanide Shallow Effluent Limits
PRIORITIZED RANK	20
CATEGORY	Implementation
GENERALIZED RANK	MEDIUM
COMPLEXITY	HIGH
SCORE	39
ISSUE NAME	Cyanide Effluent Limitations Policy for Shallow Water Dischargers
ISSUE SUMMARY	<p>If the Water Board adopts a marine chronic site-specific objective (SSO) of 2.9 ug/l for cyanide as described in Issue Rank 18, dischargers which receive dilution of at least 10:1 in receiving waters will be able to comply with effluent limitations derived from the SSO. However, there are dischargers to shallow water to whom the Board has not granted dilution credits (zero dilution). These dischargers may not be assured of achieving the SSO-based effluent limitation through reasonable treatment, source control and pollution prevention measures. Unlike metals and selenium, cyanide is not a conservative pollutant and data from the Regional Monitoring Program (RMP) indicate it does not threaten to accumulate in the waters and sediment of the Bay. Cyanide attenuates in the receiving waters due to degradation as well as dilution, but detailed information on fate and transport of cyanide in the Bay is incomplete. Point source dischargers are the only significant source of cyanide to the Bay. Information is now being collected by shallow water dischargers to better define attenuation of cyanide in areas of the region near their discharges. This information will be used to develop an effluent limitation policy for shallow dischargers.</p>
ESTIMATED PERSONNEL-YEARS (PY)	1.5
PY RUNNING TOTAL	15.0
IMPLEMENTING DIVISION	NPDES
PROPOSED BY:	Water Board
SUPPORTED BY:	City of San Jose City of Sunnyvale Sonoma County Water Agency

ISSUE TITLE	Low Risk Site Closure
PRIORITIZED RANK	21
CATEGORY	Implementation
GENERALIZED RANK	MEDIUM
COMPLEXITY	MEDIUM
SCORE	38
ISSUE NAME	A policy to address closure for low-risk groundwater contaminant sites
ISSUE SUMMARY	Resolution 92-49 directs the Water Board to ensure that water affected by an unauthorized release attains either background water quality or the best water quality which is reasonable if background water quality cannot be restored. Any alternative level of water quality less stringent than background must be consistent with the maximum benefit to the people of the State, not unreasonably affect current and probable future beneficial use of affected water, and not result in water quality less than that prescribed in the water quality control plan for the basin within which the site is located. Resolution 92-49 does not require, however, that the requisite level of water quality be met at the time of site closure. Even if the requisite level of water quality has not yet been attained, a site may be closed if the level will be attained within a reasonable period of time. Such sites include petroleum and solvent sites where biodegradation is occurring.
ESTIMATED PERSONNEL-YEARS (PY)	0.9
PY RUNNING TOTAL	15.9
IMPLEMENTING DIVISION	Toxic Cleanup, Groundwater Protection & Waste Containment
PROPOSED BY:	Water Board
SUPPORTED BY:	

ISSUE TITLE	Dilution Policy
PRIORITIZED RANK	22
CATEGORY	Implementation
GENERALIZED RANK	MEDIUM
COMPLEXITY	HIGH
SCORE	37
ISSUE NAME	Mixing zone policy for riverine and estuarine discharges, consistent with State Implementation Policy for Toxic Pollutants (SIP)
ISSUE SUMMARY	In 2000, the SIP superseded dilution policy provisions of the Basin Plan, and recent January 2004 amendments removed superseded language. Dilution for the purposes of calculating effluent limitations is being implemented on a permit-by-permit basis, consistent with past Water Board actions. The regulated community has requested that the Water Board consider the more sophisticated hydrodynamic modeling tools that have been developed in the last few years to develop a revised dilution policy for riverine and estuarine discharges in the region. These modeling tools can address the implications of multiple discharges in an estuarine system, including urban runoff, that could not be ascertained back in 1986 when the policy was established. This project is expected to take substantial staff resources, due to the controversial history on the topic and the need to effectively communicate technical results and assumptions to the interested public.
ESTIMATED PERSONNEL-YEARS (PY)	2.1
PY RUNNING TOTAL	19.0
IMPLEMENTING DIVISION	NPDES
PROPOSED BY:	Water Board
SUPPORTED BY:	Bay Planning Coalition City of San Jose City of Sunnyvale San Francisco Public Utilities Commission Sonoma County Water Agency Western States Petroleum Association

ISSUE TITLE	Continuous Parameter Compliance
PRIORITIZED RANK	23
CATEGORY	Implementation
GENERALIZED RANK	LOW
COMPLEXITY	MEDIUM
SCORE	35
ISSUE NAME	Compliance Determination with Continuously Monitored Parameters (e.g., chlorine residual and pH)
ISSUE SUMMARY	<p>Federal regulations require grab samples for compliance monitoring. But based on experience, the Water Board believes that continuous pH monitoring provides better surveillance and more rapid response, consistent with its flow-through bioassay requirements. Compliance determination for continuous monitoring should be statistically appropriate. In this proposed amendment, the Water Board would revise pH limitations to provide an excursion allowance that ensures compliance 99% of time (7 hrs., 26 minutes per month; 60 minute/single event). Excursion allowance is regulation for industrial dischargers in 40 CFR 401.17. A similar approach could be employed for other continuously monitored parameters, such as total chlorine residual, provided that water quality objectives are met in the receiving waters.</p> <p>State Water Board is currently reviewing such policies for adoption at the statewide level. Water Board staff believe that the statewide level would be the appropriate level of planning for this issue, if it addresses region-specific issues. Water Board staff will continue to track the issue through the Basin Plan roundtable and other means.</p>
ESTIMATED PERSONNEL-YEARS (PY)	0.9
PY RUNNING TOTAL	19.9
IMPLEMENTING DIVISION	NPDES
PROPOSED BY:	Water Board
SUPPORTED BY:	City of Sunnyvale

ISSUE TITLE	Groundwater Institutional Controls
PRIORITIZED RANK	24
CATEGORY	Implementation
GENERALIZED RANK	LOW
COMPLEXITY	HIGH
SCORE	34
ISSUE NAME	A policy to require the development and implementation of institutional controls and site management plans at sites with residual contamination.
ISSUE SUMMARY	Institutional controls, such as deed restrictions, limit use of the property to commercial/industrial purposes and prohibit residential and other sensitive uses. The policy would also require implementation of appropriate health and safety plans in the event that subsurface activities are performed, and restricts the use of groundwater.
ESTIMATED PERSONNEL-YEARS (PY)	1.5
PY RUNNING TOTAL	20.4
IMPLEMENTING DIVISION	Toxic Cleanup, Groundwater Protection & Waste Containment
PROPOSED BY:	Water Board
SUPPORTED BY:	

ISSUE TITLE	Acute Toxicity Update
PRIORITIZED RANK	25
CATEGORY	Implementation
GENERALIZED RANK	LOW
COMPLEXITY	MEDIUM
SCORE	32
ISSUE NAME	Acute Toxicity methods
ISSUE SUMMARY	<p>U.S. EPA has requested that the Water Board change its acute toxicity program described in the Basin Plan. Currently, NPDES permit limits are based on evaluation of the 11-sample median and 90th percentile values for monitoring frequencies of monthly or more frequent (Table 4-4). Federal regulations specify acute toxicity limits to be expressed as: Maximum Daily Limitation = minimum of 70% survival; Monthly Median Limitation = minimum of 90% survival and a statistically significant difference between the effluent and control samples. U.S. EPA has requested that acute toxicity testing protocols follow U.S. EPA's most recent guidance, which is currently the 5th edition of Methods for Measuring the Acute Toxicity and Effluents and Receiving Waters to Freshwater and Marine Organisms (EPA 821-R-012-02).</p> <p>In response to comments received from U.S. EPA, Water Board staff reviewed the issue and confirmed that the 5th edition is already being implemented in NPDES permits. Since the mandatory minimum penalty law was revised in 2003, whole effluent toxicity violations do not trigger mandatory minimum penalties unless there are no toxic pollutant limits (which is not the case in permits from the San Francisco Bay Region). Therefore, changing the allowable exceedance frequency to conform with federal regulations would not trigger non-discretionary enforcement as had been feared. Staff will consider making changes to Table 4-4 in accordance with U.S. EPA comments in conjunction with general editorial updates to the NPDES program and the effluent toxicity characterization program.</p>
ESTIMATED PERSONNEL-YEARS (PY)	0.9
PY RUNNING TOTAL	21.3
IMPLEMENTING DIVISION	NPDES
PROPOSED BY:	Water Board
SUPPORTED BY:	U.S. EPA, Region IX

ISSUE TITLE	Limited REC-1
PRIORITIZED RANK	25
CATEGORY	Beneficial Uses
GENERALIZED RANK	LOW
COMPLEXITY	LOW
SCORE	32
ISSUE NAME	Add Beneficial Use of Limited Contact Recreation
ISSUE SUMMARY	<p>Add a new Beneficial Use of Limited Water Contact Recreation and narrow the current definition of Water Contact Recreation (REC-1) to full immersion swimming. Incidental exposures associated with fishing could fall under Limited Contact Recreation.</p> <p>Water Board staff review of the issue during the comment period concluded that since the issue of Beneficial Use definitions is being addressed through the Basin Plan Roundtable, that it is better addressed at the statewide level than regional basin planning.</p>
ESTIMATED PERSONNEL-YEARS (PY)	0.3
PY RUNNING TOTAL	21.6
IMPLEMENTING DIVISION	NPDES, Planning and TMDL
PROPOSED BY:	City of Sunnyvale
SUPPORTED BY:	

ISSUE TITLE	Surface Water-Groundwater Interactions
PRIORITIZED RANK	27
CATEGORY	Implementation
GENERALIZED RANK	LOW
COMPLEXITY	HIGH
SCORE	30
ISSUE NAME	A policy to address Surface Water-Groundwater Interactions
ISSUE SUMMARY	Several issues have been identified, which simultaneously affect the quality and quantity of surface water and groundwater due to the dynamic relationship between the two. These issues include surface water infiltration to groundwater (e.g., recharge and stormwater infiltration), groundwater discharge to surface water (e.g., plume discharges), changing land use as it affects runoff and recharge to groundwater, and the effects of surface water diversion and groundwater withdrawal on creek and riparian habitat and on water quality. The Basin Plan currently only addresses the policy for constructing, using and permitting shallow drainage wells (dry wells).
ESTIMATED PERSONNEL-YEARS (PY)	2.1
PY RUNNING TOTAL	23.7
IMPLEMENTING DIVISION	Toxic Cleanup, Groundwater Protection & Waste Containment, Watershed
PROPOSED BY:	Water Board
SUPPORTED BY:	

ISSUE TITLE	Change MUN WQOs
PRIORITIZED RANK	28
CATEGORY	Beneficial Uses
GENERALIZED RANK	LOW
COMPLEXITY	HIGH
SCORE	28
ISSUE NAME	Correct Water Quality Objectives for MUN beneficial use (Table 3-5)
ISSUE SUMMARY	<p>Application of water quality objectives in Table 3-5, to protect MUN (municipal water supply or drinking water), is based on Title 22 drinking water standards. These standards were developed for finished tap water and are not necessarily appropriate for source water which will subsequently be treated at a water treatment plant. Objectives in Table 3-5 should take into account that these waters will be subjected to additional treatment before being used as drinking water.</p> <p>Water Board staff note that such proposed changes are not straightforward unless specific numeric values are substituted and cited appropriately, preferably in State or federal regulation. It is probably an issue better addressed at the statewide level and not an efficient use of regional planning resources.</p>
ESTIMATED PERSONNEL-YEARS (PY)	1.5
PY RUNNING TOTAL	25.2
IMPLEMENTING DIVISION	ALL
PROPOSED BY:	San Francisco Public Utilities Commission
SUPPORTED BY:	

ISSUE TITLE	Adopt U.S. EPA Bacteria WQOs
PRIORITIZED RANK	28
CATEGORY	Water Quality Objectives
GENERALIZED RANK	LOW
COMPLEXITY	HIGH
SCORE	28
ISSUE NAME	Adopt U.S. EPA's Bacteriological Criteria as Water Quality Objectives
ISSUE SUMMARY	<p>In 1986, the Water Board included the then-newly adopted U.S. EPA bacteriological criteria for reference (Table 3-2), but not as water quality objectives. U.S. EPA has requested that the Water Board take the next step of adopting them as State water quality objectives, as has been done in some other Regional Water Board jurisdictions. Table 3-1 contains bacteriological water quality objectives.</p> <p>Some bacteriological criteria are currently cited in Table 3-2 of the Basin Plan as U.S. EPA criteria, not water quality objectives. In their comment letter, U.S. EPA requested that Water Board adoption of bacteriological criteria as water quality objectives precede U.S. EPA's promulgation of these criteria in the State's coastal waters. U.S. EPA is encouraging all Regional Water Boards to adopt the 1986 criteria as State water quality objectives for their non-coastal waters. This issue is under active discussion at the Basin Plan roundtable as a statewide planning priority, in order to make Regional Water Board planning resources available for other priorities. U.S. EPA noted that such promulgation would only affect coastal waters in our region, and requests that this Water Board adopt the objectives for inland surface waters. Table 3-1 of the Basin Plan already contains bacteriological objectives (fecal coliform) to protect these waters, and our experience has shown that the U.S. EPA objectives are not significantly different from Basin Plan objectives based on analyses from the Section 303d impaired water bodies listings in 2002. For example, an analysis of compliance with Table 3-1 (objectives) and 3-2 (U.S. EPA criteria) yielded the identical conclusions of percent exceedances and impairment at every beach analyzed in the 2002 303d process, as documented in the administrative record for that action.</p>
ESTIMATED PERSONNEL-YEARS (PY)	1.5
PY RUNNING TOTAL	26.7
IMPLEMENTING DIVISION	Planning and TMDL
PROPOSED BY:	U.S. EPA, Region IX

ISSUE TITLE	Wet Weather Application of Standards
PRIORITIZED RANK	30
CATEGORY	Beneficial Uses
GENERALIZED RANK	LOW
COMPLEXITY	HIGH
SCORE	27
ISSUE NAME	Application of Water Quality Standards during wet weather
ISSUE SUMMARY	The compliance status of wet weather overflows is problematic if the constituent concentrations are compared directly with receiving water objectives. Stormwater from separate sewer systems have potentially similar compliance problems. This issue would entail developing a new policy for addressing wet weather discharges that recognizes that they are highly variable and intermittent and may have different impacts depending on the receiving water.
ESTIMATED PERSONNEL-YEARS (PY)	1.5
PY RUNNING TOTAL	28.2
IMPLEMENTING DIVISION	NPDES, Watershed, Planning and TMDL
PROPOSED BY:	San Francisco Public Utilities Commission
SUPPORTED BY:	

ISSUE TITLE	TPH Tech. Based Limit
PRIORITIZED RANK	31
CATEGORY	Implementation
GENERALIZED RANK	LOW
COMPLEXITY	HIGH
SCORE	25
ISSUE NAME	Add technology based limit for Total Petroleum Hydrocarbons (TPH)
ISSUE SUMMARY	The two general NPDES permits for the discharge of treated groundwater from fuel leak and solvent cleanup sites contain a technology-based limit of 50 ug/l total petroleum hydrocarbons (TPH). This was included in the initial permits based on the analytical level of detection, defining the best available technology as that which treats the TPH levels to “non-detect.” In this project the 50 ug/l or similar technology-based limit would be placed in Chapter 4 of the Basin Plan.
ESTIMATED PERSONNEL-YEARS (PY)	1.5
PY RUNNING TOTAL	29.7
IMPLEMENTING DIVISION	NPDES, Toxic Cleanup
PROPOSED BY:	Water Board
SUPPORTED BY:	

ISSUE TITLE	Reasonable Potential Policy for Toxicity
PRIORITIZED RANK	32
CATEGORY	Implementation
GENERALIZED RANK	LOW
COMPLEXITY	HIGH
SCORE	19
ISSUE NAME	Reasonable potential strategy for toxicity or potential for allowing chronic toxicity testing only
ISSUE SUMMARY	<p>The State Implementation Policy (SIP) for toxic pollutant objectives gives discretion to Regional Water Boards regarding selection of elements to use in determination of whether effluent limits are warranted for a given pollutant ("Reasonable Potential Analysis"). A strategy could be spelled out in the Basin Plan to evaluate reasonable potential for toxicity to determine whether limits are necessary or to permit chronic toxicity monitoring only, if reasonable potential for acute toxicity is not found.</p> <p>Water Board staff believe that acute toxicity monitoring and limitations assist compliance and attention to process control and pollution prevention, and are unsure about developing the proposed strategy.</p>
ESTIMATED PERSONNEL-YEARS (PY)	1.5
PY RUNNING TOTAL	31.8
IMPLEMENTING DIVISION	NPDES
PROPOSED BY:	City of San Jose
SUPPORTED BY:	

Staff Report

APPENDIX C

**Existing and Potential Beneficial Uses of
Surface Water Bodies**

1975 and 1986 Basin Plans

Staff Report

APPENDIX D

**Comparison of Groundwater Basins in
1980 and 2003 DWR Bulletin 118 Reports**

Table D-1 Comparison of Groundwater Basin Designations, Department of Water Resources Bulletin 118 1980 and 2003

County	Groundwater Basin Name in 1995 Basin Plan, DWR Bulletin 118 (1980) (1)	Groundwater Basin Name proposed in 2005 Basin Plan Amendment DWR Bulletin 118 (2003) (2)	Groundwater Sub-Basin DWR Bulletin 118 (2003) (2)	Basin Number in 1995 Basin Plan	Basin Number Error in 1995 Basin Plan	Basin Number in 2005 Basin Plan Update	MUN (3)	PROC (4)	IND (5)	AGR (6)	FRESH (7)
Alameda	Castro Valley	Castro Valley	--	2-8		2-8	P	P	P	P	--
Alameda	Alameda Creek (Niles Cone)	Santa Clara Valley	Niles Cone	2-9.01		2-9.01	E	E	E	E	--
Alameda and Contra Costa	East Bay Plain	Santa Clara Valley	East Bay Plain	2-9.01	2-9.04	2-9.04	E	E	E	E	--
Alameda and Contra Costa	Livermore Valley	Livermore Valley	--	2-10		2-10	E	E	E	E	--
Alameda	Sunol Valley	Sunol Valley	--	2-11		2-11	E	E	E	E	--
Contra Costa	Pittsburg Plain	Pittsburg Plain	--	2-4		2-4	P	P	P	P	--
Contra Costa	Clayton Valley	Clayton Valley	--	2-5		2-5	E	P	P	P	--
Contra Costa	Ygnacio Valley	Ygnacio Valley	--	2-6		2-6	P	P	P	P	--
Contra Costa	San Ramon Valley	San Ramon Valley	--	2-7		2-7	E	P	P	E	--
Contra Costa	Arroyo del Hambre Valley	Arroyo del Hambre Valley	--	2-31		2-31	P	P	P	P	--
Marin	Sand Point Area	Sand Point Area	--	2-27		2-27	E	P	P	P	--
Marin	Ross Valley	Ross Valley	--	2-28		2-28	E	P	P	E	--
Marin	San Rafael Valley	San Rafael Valley	--	2-29		2-29	P	P	P	P	--
Marin	Novato Valley	Novato Valley	--	2-30		2-30	P	P	P	P	--
Napa	Napa Valley	Napa-Sonoma Valley	Napa Valley	2-2.01		2-2.01	E	E	E	E	--
Napa and Solano	Napa Valley	Napa-Sonoma Valley	Napa - Sonoma Lowlands	2-2	2-2.03	2-2.03	E	E	E	E	--
San Francisco and San Mateo	Visitacion Valley	Visitacion Valley	--	2-32		2-32	P	E	E	P	--
San Francisco and San Mateo	Islais Valley	Islais Valley A (8)	--	2-33		2-33 A	P	E	E	P	--
San Francisco	Merced Valley (North) (partial)	Islais Valley B (8)	--	2-35		2-33 B	P	P	P	E	--
San Francisco	Islais Valley (partial)	South San Francisco	--	2-33		2-37	P	E	E	P	--
San Francisco and San Mateo	San Francisco Sands (partial)	Westside A (8)	--	2-34		2-35 A	E	P	P	E	--
San Francisco	San Francisco Sands	Lobos	--	2-34		2-38	E	P	P	E	--
San Francisco	San Francisco Sands	Marina	--	2-34		2-39	E	P	P	E	--
San Francisco	San Francisco Sands	Downtown	--	2-34		2-40	E	P	P	E	--
San Francisco	Merced Valley (North)	Westside B (8)	--	2-35		2-35 B	P	P	P	E	--
San Mateo	Merced Valley (South)	Westside C (8)	--	2-35A		2-35 C	E	P	P	E	--
San Mateo	San Mateo Plain	Westside D (8)	--	2-9A		2-35 D	E	E	E	P	--
San Mateo	San Mateo Plain	Santa Clara Valley	San Mateo Plain	2-9A		2-9.03	E	E	E	P	--
San Mateo and Santa Clara	Santa Clara Valley (& Coyote)	Santa Clara Valley (9)	Santa Clara	2-9B		2-9.02	E	E	E	E	--
San Mateo	Half Moon Bay Terrace	Half Moon Bay Terrace	--	2-22		2-22	E	P	P	E	--
San Mateo	San Gregorio Valley	San Gregorio Valley	--	2-24		2-24	E	P	P	E	--
San Mateo	Pescadero Valley	Pescadero Valley	--	2-26		2-26	E	P	P	E	--
San Mateo	San Pedro Valley	San Pedro Valley	--	2-36		2-36	P	P	P	P	--
Solano	Suisun-Fairfield Valley	Suisun-Fairfield Valley	--	2-3		2-3	E	E	E	E	--
Sonoma and Marin	Petaluma Valley	Petaluma Valley	--	2-1		2-1	E	P	P	E	--
Sonoma	Sonoma Valley	Napa-Sonoma Valley	Sonoma Valley	2-2.022	2-2.02	2-2.02	E	P	P	E	--
Sonoma and Marin	Sebastopol-Merced Formation Highlands	Wilson Grove Formation Highlands	--	2-25		1.59	E	P	P	E	--
Sonoma and Marin	Sebastopol-Merced Formation Highlands	Wilson Grove Formation Highlands	--	Not listed		1.59	See RB1 Basin Plan (10)				--

Table D-1 Comparison of Groundwater Basin Designations, Department of Water Resources Bulletin 118 1980 and 2003

County	Groundwater Basin Name in 1995 Basin Plan, DWR Bulletin 118 (1980) (1)	Groundwater Basin Name proposed in 2005 Basin Plan Amendment DWR Bulletin 118 (2003) (2)	Groundwater Sub-Basin DWR Bulletin 118 (2003) (2)	Basin Number in 1995 Basin Plan	Basin Number Error in 1995 Basin Plan	Basin Number in 2005 Basin Plan Update	MUN (3)	PROC (4)	IND (5)	AGR (6)	FRESH (7)
Sonoma	Kenwood Valley	Kenwood Valley	--	2-19		2-19	E	P	P	E	--
Sonoma	Not listed	Napa - Sonoma Volcanic Highlands	--	Not listed		2-23	X	X	X	X	X
Santa Clara	Not listed	Gilroy-Hollister Valley	Llagas Area	Not listed		3-3.01	See RB3 Basin Plan (11)				

Notes:



Indicates revision to 1995 Basin Plan

- 1 Department of Water Resources (DWR) Bulletin 118 "California Groundwater", 1980
 - 2 Department of Water Resources (DWR) Bulletin 118 "California Groundwater", 2003
 - 3 MUN = Municipal and domestic water supply
 - 4 PROC = Industrial process water supply
 - 5 IND = Industrial service water supply
 - 6 AGR - Agricultural water supply
 - 7 FRESH = Freshwater replenishment to surface water; designation will be determined at a later date, for the interim, a site-by-site determination will be made

 - 8 The existing and potential beneficial uses for groundwater basins listed in the 1995 Basin Plan (Table 2-3) were assigned to the new groundwater basins based on the geographic location of the old basins compared to the new basins. The basin names, such as Westside A, Westside B, etc., are informal names assigned by the Water Board to preserve the beneficial use designations in the 1995 Basin Plan and do not represent sub-basins identified by the Department of Water Resources.

 - 9 The Santa Clara Valley groundwater basin/ Santa Clara groundwater sub-basin is also known as Coyote Valley.
 - 10 This groundwater basin is also located in the North Coast Region (RB1); beneficial uses of groundwater are specified in the Basin Plan for RB1
 - 11 This groundwater basin is also located in the Central Coast Region (RB3); beneficial uses of groundwater are specified in the Basin Plan for RB3
- E = Existing beneficial uses; based on best available information
P = Potential beneficial uses; based on best available information
X = This groundwater basin was not listed in the 1995 Basin Plan; designation will be determined at a later date, for the interim, a site-by-site determination will be made
See DWR Bulletin 118 (2003) for groundwater basin characteristics.

Figure D-1 Groundwater Basins: San Francisco

