INITIAL STAFF REPORT

for the

2011 Triennial Review

of the

Water Quality Control Plan

for the

North Coast Region

June 14, 2011

Planning Staff
North Coast Regional Water Quality Control Board

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INTRODUCTION

This *Initial Staff Report for the 2011 Triennial Review* of the *Water Quality Control Plan for the North Coast Region* (2011 Initial Staff Report) contains the initial assessment by North Coast Regional Water Quality Control Board (Regional Water Board) staff on the effectiveness (adequacies and inadequacies) of the *Water Quality Control Plan for the North Coast Region* (Basin Plan). This assessment was based on the May 2011 version of the Basin Plan.

The 2011 Initial Staff Report contains:

- A brief background of basin planning, including a description of the Triennial Review process.
- Status updates on the twenty-nine issues included on the 2007 Triennial Review List. Each update includes Regional Water Board staff's recommendation relative to maintaining the issue on the *2011 Triennial Review List*. The recommendation also includes staff's proposal on which of these issues should be included on the "Short List" of Triennial Review Issues. The Short List would include those issues staff believes could be brought to the Board for consideration as a Basin Plan amendment within the three year Triennial Review timeframe.
- Identification of the five issues brought to Regional Water Board staff's attention since adoption of the 2007 Triennial Review. Regional Water Board staff recommendations are included for each of this issues as described above.
- Regional Water Board staff's initial recommendations on the proposed:
    - *2011 Triennial Review List*, organized to present issues roughly in the order they would be transferred to the Short List after Regional Water Board's final consideration of the issue.
    - *Short List of 2011 Triennial Review Issues*.
- Proposed schedule and framework for the 2011 Triennial Review process.

As part of the Triennial Review process, the Regional Water Board is required to:

- Identify those portions of the Basin Plan which are in need of modification, including revisions and/or additions to existing language; and
- Recognize those portions of the Basin Plan which are appropriate as written.

The *2011 Triennial Review List* and *Short List of 2011 Triennial Review Issues*, when adopted by the Regional Water Board, will direct the efforts of planning staff, and other program staff as needed, over the next three years. As resources allow, staff will investigate the merits of each of the water quality issues identified on the Triennial Review List as a potential Basin Plan amendment. Staff will provide updates on the various issues as the projects develop into "stand alone" basin plan amendments.

As an item on the *Short List of 2011 Triennial Review Issues* is completed, staff will turn their attention to the next issue on the *2011 Triennial Review List*, as appropriate. Proposed basin plan amendments may be presented to the Regional Water Board in an

order other than that indicated on the *2011 Triennial Review List* and *Short List of 2011 Triennial Review Issues* due to the complexity of issues, coordination with the State Water Board or for a myriad of other reasons. The *2011 Triennial Review List* and *Short List of 2011 Triennial Review Issues* will be the "general plan" that directs planning staff resources.

Subsequently, and separate from the Triennial Review process, the Regional Water Board will consider each proposed Basin Plan amendment using public hearings and the California Environmental Quality Act (CEQA) functional equivalent process. This will allow the Regional Water Board to consider each potential Basin Plan amendment (BPA) on its own merits and to receive public input on specific issues.

Basin Planning and the Triennial Review Process

The Basin Plan is the Regional Water Board's master water quality control planning document. It designates beneficial uses and water quality objectives for waters of the State, including surface waters and groundwater. It also includes programs of implementation to achieve water quality objectives. The Basin Plan has been adopted and approved by the State Water Resources Control Board (State Water Board), as well as by the United States Environmental Protection Agency (USEPA) and the Office of Administrative Law (OAL) when required.

The Basin Plan is a resource for the Regional Water Board and others who use water and/or discharge waste in the North Coast Region. Other agencies and organizations involved in environmental permitting and resource management activities also rely on the Basin Plan.

The North Coast Regional Water Board adopted its first interim Basin Plans in 1971. These were followed in 1975 by the *Water Quality Control Plan for the Klamath River Basin (1A)* and the *Water Quality Control Plan for the North Coastal Basin (1B)*. In 1988, the Regional Water Board combined and updated these two comprehensive plans into a single *Water Quality Control Plan for the North Coast Region*. The Regional Water Board has amended the Basin Plan more than forty times between 1975 and 2011. The chronology of these actions is provided in the *Summary of Basin Plan Amendments* attached to the Basin Plan as Appendix 1. The Summary reflects the Regional Water Board's commitment to ensuring the Basin Plan remains a "living" document reflective of the current regulatory framework and those issues that are important in the North Coast Region.

Basin Plan amendments are adopted following noticed public hearings. Public draft Basin Plan amendments and supporting documents, CEQA substitute environmental documents, are made available for public review at least 30 days before Regional Water Board action. Written comments are requested to arrive before the scheduled Board

hearing to allow staff adequate time to prepare written responses and to ensure timely consideration of comments and responses by the Regional Water Board.

Periodic review of the Basin Plan is required by state and federal law. California Water Code section 13240 states that Basin Plans "…shall be periodically reviewed and may be revised." Federal Clean Water Act section 303(c)(1) states that the Regional Water Boards "…shall from time to time (but at least once each three year period…) hold public hearings for the purpose of reviewing applicable water quality standards and, as appropriate, modifying and adopting standards." Because federal law requires that water quality standards be reviewed every three years, the periodic review of the Basin Plan is commonly referred to as the "Triennial Review." The Triennial Review is not itself a Basin Plan amendment and does not itself result in changes to the Basin Plan. It is the process by which the Regional Water Board identifies and ranks Basin Plan issues in need of further review.

The Triennial Review process relies on the solicitation of public comments to help inform the Regional Water Board of the water quality related issues present in the North Coast Region. Those issues best addressed through the Basin Plan amendment process are assembled into the Triennial Review List. Based on suggestions received from staff and the public, the Regional Water Board adopts a resolution containing the Triennial Review List, of issues to be investigated over the next three years and, when appropriate, addressed through the adoption of Basin Plan amendments. As part of the 2011 Triennial Review, Regional Water Board staff is proposing the adoption of a *Short List of 2011 Triennial Review Issues*. Issues included on the Short List are those issues that in staff's opinion are far enough along in the investigation and development stage that a Basin Plan amendment will likely be brought to the Regional Water Board for formal consideration during the three year Triennial Review period.

At the conclusion of the Triennial Review, the Regional Water Board will adopt a resolution which will, in part:

- Summarizes those sections of the Basin Plan the Regional Water Board has determined to be appropriate and accurate.
- Sets forth a list of potential revisions to the Basin Plan as described in the Triennial Review List and Short List of Triennial Review Issues.

Since 1988 the Regional Water Board has conducted seven Triennial Reviews of the Basin Plan (1988, 1992, 1995, 1998, 2001, 2004, and 2007). During that time the Regional Water Board has considered a number of issues to be important in the protection of water quality in the North Coast Region.

Status of Issues on the 2007 Triennial Review List Scheduled for Development (Tasks 1 to 15)

The 2007 Triennial Review List (Resolution R1-2007-0076) contained twenty-nine prioritized issues; the solution for which could result in a Basin Plan amendment (BPA). The 2007 Triennial Review List established a schedule for work to proceed on fifteen of these issues during the three year planning horizon. More information on the development of the 2007 Triennial Review List can be found in the *Initial Staff Report for the 2007 Triennial Review* (June 18, 2007) and in the *2007 Triennial Review Staff Report and Workplan* (September 18, 2007). These documents can be found at the Regional Water Board's web site at: http://www.waterboards.ca.gov/northcoast/water_issues/programs/basin_plan/triennial_review.shtml

A status update on each of the twenty-nine issues identified on the 2007 Triennial Review List is provided below. Each status update includes a brief discussion on the issue background, summary of work in progress and concludes with Regional Water Board staff's recommendation as to the appropriateness of maintaining the issue on the *2011 Triennial Review List*. The first fifteen issues were scheduled to have some work completed during the 2007 to 2010 Triennial Review timeframe (ranging from issue investigation to Regional Water Board consideration of a BPA). No Regional Water Board staff work was planned for the remaining fourteen issues on the Triennial List as no resources were available to allow active investigation of these issues.

Task 1: TMDL Implementation Strategies (Action Plans for Klamath, Elk and Freshwater)

The Regional Water Board began developing Total Maximum Daily Loads (TMDLs) for impaired waterbodies in the North Coast Region in the mid 1990s. During that time the Regional Water Board directed staff to use a variety of tools to implement TMDL load allocations. The first TMDL adopted by the Regional Water Board, the Garcia River Sediment TMDL, became regulation in January 2002; eight years after staff began development of the TMDL. In 2004, the Regional Water Board adopted Resolution R1-2004-0087, directing staff to develop a workplan that set watershed priorities for addressing sediment waste discharges at a watershed-specific scale. The Board intended the workplan approach to be a more effective and timely means for addressing sediment waste discharges than adopting the more labor intensive watershed specific action plans. *The Regional Water Board Staff Workplan to Control Excess Sediment in Sediment-Impaired Watersheds* was released on April 8, 2008. This workplan presented a list of regional tasks as well as more specific actions for twenty sediment impaired waterbodies in the Region. However, in 2007 as part of the Triennial Review process the Regional Water Board directed staff to re-engage in the development of watershed specific action plans for impaired waterbodies. The Regional Water Board specifically directed staff, as the highest priority, to develop watershed specific

implementation programs (e.g. action plans) as part of TMDL development for Klamath River, Elk River and Freshwater Creek.

Klamath River TMDL Action Plan

Status: Completed

Background:
Regional Water Board staff, in concert with USEPA, the State of Oregon, tribes and other interested stakeholders began working on the Klamath River TMDL in the mid 1990s. The Klamath River TMDL Action Plan (and Lost River Implementation Plan) was adopted as a BPA by the Regional Water Board in March 2010 (Resolution R1-2010-026). The State Water Board approved the Action Plan in March 2010 with concurrence by USEPA and the OAL in December 2010. The amended Basin Plan, containing the Klamath River TMDL Action Plan (and Klamath River site specific dissolved oxygen objective) was released to the public and posted on the web in March 2011.

More specific information is available for download at the Regional Water Board's website at:
http://www.swrcb.ca.gov/northcoast/water_issues/programs/tmdls/klamath_river/.

Staff Recommendation:
Remove from 2011 Triennial Review List

Elk River TMDL Action Plan

Status: Underway

Background:
Regional Water Board staff began work on the Elk River Sediment TMDL in 2002. The first two chapters of the draft Staff Report, the Introduction and Problem Statement, were released to the public and posted on the web in May 2009. Staff and Board workshops were held to present this material.

The Upper Elk River Sediment Source Analysis (Chapter 3 of the draft Staff Report) presents estimates of past, present and future sediment loads. The Analysis was released to the public on May 26, 2011. A staff workshop will be held in Eureka the evening of June 28, 2011 to present to the public the introduction to the TMDL, an overview on the Elk River watershed, including the sediment-related impacts to beneficial uses of water and creation of nuisance conditions, and the scope and results of the sediment source analysis. No Regional Water Board action will be taken at this workshop.

A Regional Water Board workshop may be held in late summer or early autumn to inform the Board and the public on the development of the remaining components of the TMDL (targets, linkage analysis, load allocations and implementation program). At the conclusion of the Regional Water Board workshop, staff will seek direction from the Board to either 1) develop an Elk River TMDL Action Plan as a basin plan amendment or 2) develop a resolution for the Board's consideration to adopt the technical aspects of the TMDL and direct permitting staff to incorporate the identified implementation actions as part of their routine permitting work.

Staff believes the development/refinement of the Elk River implementation program may be achieved using either of these two approaches. Regardless of which approach is used, the technical approaches of the Elk River Sediment TMDL would be used to inform refinements to existing permits (i.e. NPDES permits, WDRs, of waivers of WDRs) and in the development of new permit programs.

If the Regional Water Board adopted the technical portions of the Elk River Sediment TMDL by a formal Board resolution, the planning staff time needed to develop other components of a BPA would not be necessary (e.g. CEQA documentation and approvals by State Board, USEPA and OAL) staff could be directed to expedite development of other TMDL-related water quality tasks, such as watershed specific beneficial use evaluations, water quality objective revisions/development and implementation programs.

Information on this issue can be viewed and downloaded from the Regional Water Board's website at:
http://www.swrcb.ca.gov/northcoast/water_issues/programs/tmdls/elk_river/

Staff Recommendation:
Maintain Triennial Review List. Evaluate if it is feasible to adopt by resolution the technical aspects of the TMDL which would direct staff to incorporate the identified implementation actions as part of their permitting and enforcement work.

Freshwater Creek TMDL Action Plan

Status: Underway

Background:
Regional Water Board staff began work on the Freshwater Creek Sediment TMDL in 2002. The draft Introduction, Problem Statement, and Sediment Source Analysis chapters of the staff report are due to be released in the summer of 2011.

Staff believes the development/refinement of the Freshwater River implementation program can be achieved using either of these two approaches as described above for the Elk River. Regardless of which approach is used, the technical approaches of the

Freshwater Creek Sediment TMDL would be used to inform refinements to existing permits (i.e. NPDES permits, WDRs, of waivers of WDRS) and in the development of new permit programs.

If the Regional Water Board adopted the technical portions of the Elk River Sediment TMDL by a formal Board resolution, the planning staff time needed to develop other components of a BPA (e.g. CEQA documentation and approvals by State Board, USEPA and OAL) would not be necessary. Staff could be directed to expedite development of other TMDL-related water quality tasks, such as watershed specific beneficial use evaluations, water quality objective revisions/development and implementation programs.

Information on this issue can be downloaded from the Regional Water Board's website at:
http://www.swrcb.ca.gov/northcoast/water_issues/programs/tmdls/freshwater_creek/.

Staff Recommendation:
Maintain 2011 Triennial Review List. Evaluate if it is feasible to adopt by resolution the technical aspects of the TMDL which would direct staff to incorporate the identified implementation actions as part of their permitting and enforcement work.

Task 2: Region-wide Excess Sediment Amendment

Status: Completed for Klamath Basin
Ongoing for Remainder of Region (North Coast Basin)

Background
Regional Water Board staff began working on the region-wide excess sediment prohibition in the early 2000s. Due to changing resources (loss of planning staff) and higher priorities (adoption of the Klamath TMDLs by a court ordered consent decree date), staff has not actively worked on this BPA since 2008. However, as part of the Klamath River TMDL Action Plan, the Regional Water Board adopted a Klamath River Basin specific waste discharge prohibition on "unpermitted waste" (which includes excess sediment). The 10,830 square mile Klamath River Basin comprises about half (56%) of the 19,390 square mile North Coast Region.

As part of the regional tasks identified in the *Regional Water Board Staff Workplan to Control Excess Sediment in Sediment-Impaired Watersheds*, staff recommended the development of the excess sediment amendment as one of the primary tools in the control of sediment.

A number of approaches are available to facilitate completion of this important task, including applying the Klamath Basin waste discharge prohibition to all or part of the remaining portions of the Region (North Coast Basin). This could be accomplished by

including the waste discharge prohibition in other ongoing BPA development work or as a stand alone BPA. These options include:

- Watershed specific TMDL Action Plans (Task 1);
- Stream and Wetlands implementation program (Task 3);
- Groundwater implementation program (Task 6);
- Temperature implementation policy (Task 13); or
- Remain as a stand alone BPA (Task 2).

Seventeen of the twenty sediment impaired watersheds addressed in the *Regional Water Board Staff Workplan to Control Excess Sediment in Sediment-Impaired Watersheds* are located within the North Coast Basin. The extension of the waste discharge prohibition to the entire North Coast Basin (rather than watershed by watershed) would be consistent with staff's recommendation to control sediment in the sediment impaired waterbodies. This approach would also bring the entire North Coast Region in to compliance with the 2004 State's Nonpoint Source Policy which requires that all discharge of waste be covered by waste discharge requirements (WDR), waiver of WDRs, prohibitions, or some combination of these tools.

Due to the extensive impacts to waterbodies in the North Coast Region from uncontrolled sediment discharge, Regional Water Board staff continues to consider the development of an efficient sediment control program crucial in the restoration and protection of beneficial uses.

While any of the BPA projects listed above could provide the framework for the extension of the Klamath TMDL type prohibition to the North Coast Basin, staff believes that the most efficient vehicle would be to incorporate this type of prohibition with the implementation program being developed as part of Task 6. Due to the substantial revisions to the Implementation Plan chapter of the Basin Plan Task 6 will entail, and the focus Task 6 will have on implementation actions, this seems to be the most appropriate place to begin vetting this approach to the public.

Staff Recommendation:
Remove as a separate issue from the 2011 Triennial Review List. Apply the Klamath TMDL type waste discharge prohibition on "unpermitted waste" to the North Coast Basin (remainder of the region) as part of the BPA work being conducted as part of Task 6.

Task 3: Stream and Wetlands Protection

Status: Underway; Region 2 lead

Background:
In 2005, Regional Water Board staff began working on the Stream and Wetlands System Protection Policy after USEPA awarded grant funding to both the North Coast

and the San Francisco Bay Regional Water Quality Control Boards to develop a comprehensive Stream and Wetlands System Protection Policy as a BPA for consideration separately by the two Boards. However, due to loss of resources (loss of planning staff) and higher priorities (adoption of the Klamath TMDL) no work on this BPA has been undertaken by staff from the North Coast Region since 2008. Staff from the San Francisco Bay Regional Water Board continues in the lead on development of the joint work product as well as working with the State Water Board on the development of the state Wetlands Policy.

This draft BPA as developed by the San Francisco Bay Region includes:

- Wetland beneficial uses (similar to the wetland beneficial uses adopted by the North Coast Board in 2003).
- Three new objectives designed to protect stream and wetland beneficial uses. The draft objectives were designed to describe three parameters that are missing from the current regulatory framework. These parameters are relative to:
    - Stream process and dynamic equilibrium;
    - Stream and wetland system habitat integrity; and
    - Watershed hydrology. The watershed hydrology objective was included, in part, by staff to address the issues contained in Task 10 regarding instream flows.
- An implementation program based on achieving water quality objectives to protect and restore the physical integrity and associated functionality of stream and wetland systems, including perennial, intermittent, and ephemeral streams and wetlands and their associated riparian areas.

Options to address this issue include:

- Re-engaging in the development of the BPA with the San Francisco Bay Board;
- Including portion(s) of BPA, as appropriate, in other North Coast Region BPA work such as:
    - Watershed specific TMDL Action Plans (Task 1);
    - Groundwater implementation program (Task 6);
    - Instream Flow Objective (Task 10)
    - Temperature Resolution and Action Plans (Task 13); or as
    - A stand alone BPA (Task 3).

The most recent information on this issue is available at the San Francisco Bay Regional Water Board's website at:
http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/streamandwetlands.shtml

Staff Recommendation:
Remove issue from the 2011 Triennial Review List. As appropriate, incorporate portions of the BPA under development by the San Francisco Bay Region into ongoing BPA work such as Tasks 6, 10 or 13.

Task 4: Low Threat Discharge Amendment

Status: Completed

Background
Regional Water Board staff began working on this project in the mid 2000s. The Board adopted the BPA on July 23, 2009 (Resolution R1-2009-0004). The administrative record and request for action was sent to State Water Board in September 2009. The State Water Board approved the BPA on March 15, 2011, followed by OAL's approval on May 12, 2011. Following those approvals, the two action plans associated with this BPA became regulation. The revised *Stormwater Action Plan* and the new *Action Plan for Low Threat Discharges* were amended into the Basin Plan and posted on the web on May 20, 2011.

The updated Basin Plan, dated May, 2011, is available at the Regional Water Board website at
http://www.waterboards.ca.gov/northcoast/water_issues/programs/basin_plan/basin_plan.shtml.

Staff Recommendation:
Remove issue from the 2011 Triennial Review List.

Task 5: Editorial Amendment

Status: Underway

Background:
In 2007, Regional Water Board staff began working on a basin plan amendment to address those portions of the Basin Plan that were in need of updating/revision of an "editorial" or "administrative" nature. These types of revisions will not change any regulatory provision of the Basin Plan, and are considered a "Change Without Regulatory Effect" (1 CCR §100). The types of changes associated with this BPA include grammatical corrections, citation corrections, addition of section numbers, relocation/formatting of the Tables, etc.

The purpose of this BPA is to identify those portions of the Basin Plan which should be revised or reformatted to present a more "user-friendly" document.
The issues identified that could have a regulatory effect will be summarized and presented as part of future Triennial Review processes.

Chapter 1 - Introduction Editorial Amendment

Status: Pending State Water Board and OAL Approval

Background:
Editorial revisions to Chapter 1 – Introduction were adopted by the Regional Water Board on June 2008 (Resolution R1-2008-0014). This amendment introduced the formatting approach that will be used in the remaining chapters. These types of global revisions include replacing the existing header structure "Section 1 – Introduction" with "Chapter 1 – Introduction" as well as adding section header numbering. Both of these approaches will be reflected in the remaining editorial amendment work.

The adopted language for Chapter 1 is available at:
http://www.waterboards.ca.gov/northcoast/board_info/board_meetings/03_2008/items/07/Ch_1_Introduction_Changes_Accepted_02-21-08.pdf .

Chapter 2- Beneficial Uses Editorial Amendment

Status: Regional Water Board Hearing, September 29, 2011.

Background:
The proposed editorial revisions to Chapter 2 – Beneficial Uses will be available for review in mid June 2011. The draft BPA will be posted at the Regional Water Board website at:
http://www.waterboards.ca.gov/northcoast/water_issues/programs/basin_plan/editorial_amendment.shtml.

Following release of the draft BPA, staff proposes to solicit written comments until about 30 days before the scheduled Regional Water Board hearing. The Regional Water Board is tentatively scheduled to consider the editorial revisions to Chapter 2 at the September 29, 2011 Board meeting. Following Board action, the amendments containing the editorial revisions to Chapters 1 and 2 will be submitted as a package for State Water Board and Office of Administrative Law for approval.

Proposed revisions to Chapter 2 include such things as:

- Correcting typographical and grammatical corrections.
- Reordering of existing text, including alphabetizing beneficial use definitions.
- Relocation of Table 2-1 to end of chapter.
- Addition of a subsidence fishing (FISH) to text and to new column in Table 2-1.
- Removal of explanatory text, such as the discussion on water supply use, "Rare" beneficial use, and the various classes of water. It is staff intent to incorporate

this type of "non-regulatory" information into Fact Sheets that will be posted on line and can be readily updated by staff as the situation warrants.

To include as part of the Fact Sheets, staff intends to develop maps of the North Coast Region showing distribution of each beneficial use. As work on refining/updating the information contained in Table 2-1 proceeds, these maps will provide valuable information to the public on the extent and location of beneficial uses at the sub-watershed scale. As an example, the maps could be extremely useful in the designation of wetlands and in defining the extent of spawning in tributary streams.

Chapter 3 Editorial Amendment

Status: Incorporating into BPA being developed under Task 6.

Background:
Editorial revisions to Chapter 3 – Water Quality Objectives will be incorporated into the basin planning work being undertaken as part of Task 6 as a matter of efficiency. Due to the extent of the revisions proposed under Task 6, the remaining issues that are editorial in nature will be included as part of the Task 6 BPA. More substantial revisions that are outside the scope of the work for the Task 6 BPA will be identified for inclusion in future Triennial Reviews Lists.

Chapter 4 Editorial Amendment

Status: Incorporating into BPA being developed under Task 6.

Background:
Editorial revisions to Chapter 4 – Implementation Plans will be incorporated into the basin planning work being undertaken as part of Task 6 as a matter of efficiency. Due to the nature of the revisions proposed under Task 6, the format of Chapter 4 will require significant restructuring to facilitate the inclusion of implementation programs (e.g. Action Plans) for groundwater. Any remaining issues that are editorial in nature, such as inclusion of the Salmon River TMDL and deletion of outdated action plans (e.g. *Action Plan for Accidental Spills and Other Contingencies*), will also be included as part of that BPA. More substantial revisions will be identified for inclusion in future Triennial Reviews Lists

Chapter 5 Editorial Amendment

Status: Incorporated in the editorial amendment work for the other chapters.

Background
As part of the Chapter 5 editorial amendment, the references to State Water Board plans and policies are being revised to direct the reader to the State Water Board's

webpage, rather than to the "Section 5 – Plans and Polices". This approach is consistent with what other regions are doing as it will obviate the need to update the regional basin plan each time a State plan or policy is revised.

Chapter 6 Editorial Amendment

Status: Incorporating into BPA being developed under Task 6.

Background:
The deletion of the "Plans and Policies" chapter will result in the "new" Chapter 5, containing a description of the region's surveillance and monitoring programs. Since the chapter was written, five major changes have been implemented:

- Initiation of the statewide Surface Water Ambient Monitoring Program (SWAMP).
- Dissolution of State Mussel Watch and Toxic Substances Monitoring Programs.
- Development of a statewide 303(d) impaired water body listing policy, monitoring by local jurisdictions.
- Development of the statewide citizen monitoring program (Clean Water Team).
- Development of the Groundwater Ambient Monitoring and Assessment Program (GAMA).

Editorial revisions to the surveillance and monitoring chapter will be included with the BPA being developed under Task 6. The development of a comprehensive groundwater protection program will include a groundwater monitoring program, as appropriate, to ensure protection of the beneficial uses of water. The surveillance and monitoring chapter does not provide relevant information regarding the existing groundwater monitoring programs already in place across the State and in the Region.

Mapping Effort

Status: Ongoing, State Water Board Lead.

Background:
The Basin Plan maps also need to be updated with current CalWater (or similar) information on boundary locations and watershed conditions. This issue is being addressed at the statewide level and is currently under discussion by the Basin Planning Roundtable.

Staff Recommendations:
Delete from 2011 Triennial Review List.

- *Bring revisions on Chapter 2 – Beneficial Uses to the Regional Water Board for their consideration at the September 29, 2011 meeting.*

  - *Submit Chapters 1 and 2, concurrently, to the State Water Board for approval.*
- *Incorporate editorial revisions to remaining of chapters Basin Plan as part of the basin planning work being undertaken as part of Task 6.*

Task 6: Narrative Objective for Groundwater - Surface Water Policy (including groundwater objective and implementation language)

Status: Underway

Background
The need to develop a comprehensive groundwater protection policy has been expressed, in one fashion or another, in all the Triennial Review Lists since 1988. During the 2007 Triennial Review process, this issue was combined with other high priority tasks including updating groundwater objectives, adding implementation language, and a policy for the application of water quality objectives.

A team of Regional Water Board staff from the planning, permitting and cleanups units have been working on a BPA to address these tasks and other high priorities since mid-2009. The intended outcome is a Basin Plan amendment consisting of revisions to Chapters 3 and 4 of the Basin Plan which will include updates to water quality objectives and implementation language. Below is a list of some of the Basin Plan updates that will be proposed under this BPA.

Proposed Changes to Chapter 3 – Water Quality Objectives

- Replace the existing Table 3-2 (*Inorganic Organic and Fluoride Concentrations Not to be Exceeded in Domestic or Municipal Supply*) with a Policy for Application of Narrative Water Quality Objectives. This Policy will specify the process for interpreting surface and groundwater narrative water quality objectives. Removal of references to several outdated MCL concentrations and replacement with a description of the process the Regional Water Board will use to translate narrative water quality objectives into numeric limits and establish appropriate chemical concentration limits in permits, orders, etc., that meet all water quality objectives to protect all beneficial uses of water not just protection of domestic and municipal supplies.
- Add a groundwater narrative Toxicity Objective that would provide that all waters shall be maintained free of toxic substances in concentrations that may produce detrimental physiological responses in human, plant, animal, or aquatic life associated with designated beneficial uses.
- Update of the four existing Water Quality Objectives for groundwaters (and surface water objectives that previously referred to Table 3-2). The general

objectives for groundwater include: Taste and Odor, Bacteria, Radioactivity and Chemical Constituents.

Proposed Changes to Chapter 4 – Implementation Plans

- Add a groundwater protection policy and a comprehensive implementation program for this policy. This task is intended to prevent impacts to the beneficial uses of receiving waters (groundwater) from the discharge of waste by identifying management measures and monitoring programs to ensure that all land disposal projects are designed to protect applicable water quality standards (i.e. beneficial uses and water quality objectives). Action plans for agricultural and other operations that can affect water quality will be developed under this approach.
- Delete the outdated Action Plans in the Basin Plan (such as the Action Plan for Accidental Spills and Contingencies).
- Add a new *Policy for the Application of Narrative Water Quality Objectives* which will describe the process the Regional Water Board will use in establishing numeric values to implement narrative surface and groundwater water quality objectives.

The State Water Board's Recycled Water Policy, adopted in 2009, requires groundwater protection, in the form of consistent salt and nutrient management plans, be established for more than sixty groundwater basins in the North Coast Region over the next three years. The Recycled Water Policy allows for the creation of Regional Water Board approved salt and nutrient management plans at various other scales as well, including for "other regional planning area," as long as it contains the components of the required salt and nutrient management plans. The major components include:

- A monitoring plan, including for Constituents of Emerging Concern (CECs);
- Recharge/use goals and objectives;
- Identification of assimilative capacity, loading estimates, and fate and transport analysis for salt and nutrients;
- Implementation measures to protectively manage loading; and
- An antidegradation analysis.

It is Regional Water Board staff's intent to comply with these requirements by addressing many of the required components as part of the proposed BPA. In the fall of 2010, the Regional Water Board submitted a letter to the State Water Board briefly outlining this approach. The Regional Water Board received a response back from the State Water Board concurring with the proposed approach.

As a major component of this proposed BPA, a comprehensive implementation program for groundwater protection is currently under development. This will most likely require

the significant reformatting of the Implementation Plan Chapter of the Basin Plan. Currently the Chapter is structured to include subsections for:

- Point Source Measures;
- Nonpoint Source Measures; and
- Total Maximum Daily Loads.

As part of this proposed BPA, Regional Water Board staff is developing a groundwater protection policy that will provide the structure for the comprehensive groundwater implementation program being developed. Staff is proposing the development of action plans, designed to prevent the application of waste to land from impacting groundwater (and surface waters). Action plans for agricultural operations, composting operations, etc could be developed under this approach. Staff is investigating the inclusion of a proposed new section that could be used to contain regulations that do not fit comfortably in the existing structure.

The Basin Plan contains four water quality objectives for groundwater:

- Taste and odor;
- Bacteria;
- Radioactivity; and
- Chemical constituents.

However, there is no toxicity objective for groundwater included in the Basin Plan. In addition, aside from the *Policy for Onsite Waste Treatment and Disposal Systems*, there is very little language in the implementation chapter of our Basin Plan describing how the Regional Water Board proactively ensures protection of groundwater beneficial uses. The implementation chapter does contain discharge prohibitions and other specific language that limits waste discharge to surface waters within the Region. The result of this is that a wide variety of domestic, industrial, agricultural and other wastes are applied to land in amounts and concentrations that have the potential to exceed groundwater objectives.

In 1998, the Central Valley Regional Water Board adopted the *Policy for Application of Narrative Water Quality Objectives* that provides the process that staff utilize to implement narrative water quality objectives by translating these narrative objectives into numeric receiving water limits to be used in Board orders and permits. Regional Water Board staff has adopted this approach as a starting point for developing the proposed BPA.

In late 2009, Regional Water Board staff developed a problem statement and program chapter for internal use that defined the scope of the proposed BPA and the responsibilities of the various program staff tasked with its development. This approach was needed due to the extent of the work identified as necessary for the development of

a complete BPA and the need for the active participation of staff from the cleanups and permitting programs.

The Regional Water Board was updated on the status of this amendment April 2010 and CEQA scoping meeting was held in July 2010. The proposed revisions to Chapter 3 – Water Quality Objectives, including the editorial revisions, are basically complete and are currently undergoing internal program review. Staff has recently begun to work on a proposed *Groundwater Protection Policy* and related Action Plans. Staff will continue to provide written updates to the Regional Water Board on the status of this BPA. Staff plans to schedule a public workshop in early 2012 to inform the Regional Water Board and public on the status of the BPA.

Documents for this draft BPA can be viewed and downloaded at:
http://www.waterboards.ca.gov/northcoast/water_issues/programs/basin_plan/groundwater_surfacewater_amendment.shtml .

Staff Recommendation:
Maintain on the 2011 Triennial Review List. Add to Short List of 2011 Triennial Review Issues.

Task 7: Revise Dissolved Oxygen Objectives

Status: Completed Site Specific Objective for Klamath Mainstem
Ongoing for remainder of Region, including remaining free flowing streams, wetlands, lakes, and estuaries.

Background:
Regional Water Board staff began working on revising the dissolved oxygen (DO) objectives associated with this task in 2008. However, revisions to the dissolved oxygen objectives have been prioritized on all the Triennial Review Lists since 1988. Much staff time and effort has been expended on this issue in the intervening years.

In late 2008, CEQA scoping meetings were held to seek input on the scope of the environmental analysis that should be conducted as part of the BPA process. A draft Staff Report was submitted to formal peer review in mid 2009 addressing DO objectives in free-flowing aquatic systems (i.e., rivers). In 2010, a site-specific objective (SSO) for DO in the Klamath River was adopted by the Regional and State Boards and approved by USEPA, based on this work.

Efforts to develop a DO TMDL for the Laguna de Santa Rosa have highlighted the need to develop DO objectives specific to non-riverine systems, such as lakes, reservoirs, wetlands and estuaries, as well as ephemeral streams. The timely revision of the existing DO objectives is especially important to the development of the DO TMDL for the wetlands portion of the Laguna de Santa Rosa.

Documents are available for download at:
http://www.waterboards.ca.gov/northcoast/water_issues/programs/basin_plan/dissolved_oxygen_amendment.shtml.

Staff Recommendation:
Maintain on the 2011 Triennial Review List. Add to Short List of 2011 Triennial Review Issues.

Task 8: Adopt Freshwater Bacteria Objectives

Status: State Water Board lead

Background:
The Basin Plan water quality standards include only total and fecal coliform bacteria as indicators. In 1986, USEPA published 304(a) water quality criteria for bacteria in which they recommend the use of Escherichia coli (*E. coli*) and enterococci rather than fecal coliform for the protection of primary contact recreation (REC-1) in marine/coastal waters. The epidemiological data, upon which the national criteria are based, suggest that these bacterial indicators are better correlated to water contact-exposure related health effects. In addition, the USEPA "Action Plan for Beaches and Recreational Waters" (EPA/600/R-98/079, March 1999) required all states, by 2003, to adopt bacterial standards that are consistent with the USEPA guidance. The State Water Board began working on an Amendment to address this issue in 2005 at the request of the nine Regional Water Boards. A number of regions have since updated their bacteria objectives for freshwater. The North Coast Regional Water Board's Basin Plan still contains only objectives for fecal coliform. The State Water Board's draft Staff Report and proposal for freshwater bacteria objectives are tentatively scheduled to be released by State Water Board staff in the summer of 2011.

The timely revision of the existing bacteria objectives is especially important to the development of a pathogen TMDL for the Russian River watershed, scheduled for Regional Water Board consideration in 2013.

Staff Recommendation:
Maintain on 2011 Triennial Review List.

Task 9: Update Policy on the Regulation of Fish Hatcheries, Fish Rearing Facilities, and Aquaculture Operations

Status: Underway

Background:
Regional Water Board staff began limited engagement on this task in 2008. Staff from the Department of Fish and Game was extremely interested in pursing revisions to the Policy due to the nature of some of the existing language and permitting concerns. Of particular concern were the following two existing prohibitions:

- The discharge of waste resulting from cleaning activities shall be prohibited.
- The discharge of detectable levels of chemicals used for the treatment and control of disease, other than salt (NaCl) shall be prohibited."

Regional Water Board staff believes this would be an appropriate opportunity to revise the Policy to require that the *prevention and minimization* of waste discharge be a fundamental value, the inclusion of a strong monitoring and reporting program and strict effluent limits as permit conditions.

To this end, Regional Water Board staff coordinated with the USEPA to begin the development of the background information needed to conduct an environmental analysis on a potential BPA. Staff is also reviewing the most recent monitoring and reporting programs and the associated self monitoring reports, to inform the development of a new permit. This information will be extremely useful in the development of a potential BPA.

Staff Recommendation:
Maintain on 2011 Triennial Review List. Coordinate with permitting staff to ensure permit development, including any revisions to monitoring and reporting programs, informs development of a BPA, to the extent practicable.

Task 10: Adopt Instream Flow Objective

Status: Included in the Stream and Wetlands (Task 3), Region 2 Lead

Background:
Regional Water Board staff has only been peripherally involved in this task since adoption of the 2007 Triennial Review List. At the bequest of staff from the North Coast Regional Water Board, San Francisco Regional Water Board staff included an objective designed to address this issue in the draft "Stream and Wetlands System Protection Policy" that was submitted for peer review.

Improved coordination between the Regional Water Boards and the Division of Water Rights remains a high priority for Regional Water Board staff and external stakeholders as express during the recent strategic planning session held for stakeholders and staff. The need to maintain adequate instream flow has been identified TMDLs recently adopted by the Regional Water Board.

Staff Recommendation:
Maintain on 2011 Triennial Review List. Consider including a narrative "instream flow" object, modeled on the "Watershed Hydrology" objective developed by staff from the San Francisco Bay Regional Water Board, in the BPA work being developed under Tasks 6, or 13.

Task 11: Adopt Exemption Criteria for Restoration Projects

Status: Underway

Background:
Restoration is an important tool for achieving water quality conditions sufficient to protect and restore beneficial uses. The Regional Water Board currently supports restoration through grant funding, permitting, monitoring, and technical and regulatory assistance, primarily on a project-by-project basis. The Restoration Policy would codify Regional Water Board support for the construction of large-scale restoration projects that are designed to eliminate, reduce or mitigate existing sources of soil erosion, water pollution, or other impairment of beneficial uses of water. It recognizes that discharges of waste from such projects may result in temporary exceedences of water quality objectives and violate Basin Plan prohibitions, and provides a process for granting an exemption for projects that meet certain criteria, including that the project will result in long-term water quality benefits and protection of beneficial uses.

Staff Recommendation:
Maintain on the 2011 Triennial Review List. Add to Short List of 2011 Triennial Review Issues.

Task 12: Adopt Policy for Mixing Zones

Status: Underway

Background:
Regional Water Board staff was been working on this issue since early 2010 As described in the Initial "Staff Report for the 2007 Triennial Review" (June 18, 2007), this "policy would be focused only on pollutant limits intended to protect municipal supply (nitrates, chlorine break-down products, etc). Examples of where limitations would be set, might include: a mixing zone established at a wastewater outfall that would be of limited size and would not be located near any existing or potential drinking water intake."

The development of a "Mixing Zones Policy for Human Health Related Constituents", or any Basin Plan amendment, requires the compilation of substantial background information to inform the environmental impacts and alternatives analysis required for a Basin Plan amendment. Regional Water Board planning staff resources were not

available to develop this background information. Therefore, Regional Water Board staff and staff representing Publicly Owned Treatment Works (POTW) developed a "Scope of Work" that described the process by which the interested municipal discharge community would develop some of the necessary background information needed by Regional Water Board staff to pursue this proposed Basin Plan amendment.

The report, titled "Evaluation of a Mixing Zone Policy for Health-Related Constituents" (January 11, 2011), was submitted to the Regional Water Board on January 27, 2011. The report contains:

- A description of the existing regulations and policies.
- Basin Plan Amendment Alternatives
- Environmental Analysis
- References
- Appendices

This report is available at the Regional Water Board's website at: http://www.waterboards.ca.gov/northcoast/water_issues/programs/basin_plan/mixing_zone_policy.shtml

It will be used to provide background information in the development of Regional Water Board staff's project description for a proposed Basin Plan amendment to consider a *Mixing Zones Policy for Human Health Related Constituents.*

A new draft policy, more limited in scope, allowing for conditional mixing zones for point source discharges is being considered by Regional Water Board staff. The policy would apply to discharge from municipal wastewater facilities and only for pollutant limits established to protect human-health (e.g. nitrates, chlorine break-down products, etc). Examples of where limitations would be set, might include: a mixing zone established at a wastewater outfall that would be of limited size and would not be located near any existing or potential drinking water intake. This amendment would be less staff intensive than the one explained above.

Staff Recommendation:
Maintain on the 2011 Triennial Review List.

Task 13: Reevaluate Temperature Objectives to Ensure Protection to Aquatic Life

Status: Underway.

Background:
Elevated water temperature is the most widespread water quality impairment in the North Coast Region. Over 60 percent of North Coast watersheds are listed as impaired for temperature, evidence that past implementation of regulatory controls for protection

against anthropogenically elevated water temperatures is not adequate to remediate, restore, and protect temperature-impaired water bodies and to control the cumulative impacts of elevated water temperature on such watersheds. The prevention of water quality impacts from temperature related factors has been a high priority in the North Coast Region for many years. In 2007, staff was directed to proceed with work that could result in a Basin Plan amendment. The triennial review also included two other high priority issues that are relevant in the development of a regionwide temperature control program; the stream and wetlands system protection policy and instream flow objective.

The draft policy will, in part, accomplish the following:

- Acknowledges the need to develop and implement a comprehensive approach to temperature control in North Coast Region.
- Reiterates the linkage between elevated water temperatures, solar radiation, and stream shade presented in North Coast temperature TMDLs.
- Affirms the need to address water temperatures on a region-wide basis to reduce impairments and prevent further impairment;

Staff Recommendation:
Maintain on the 2011 Triennial Review List. Add to Short List of 2011 Triennial Review Issues.

Task 14: Update Beneficial Uses Chapter (Table 2-1)

Status: Not yet begun.

Background:
The beneficial use BPA, adopted by the Regional Water Board in June 2003, included definitions of five additional beneficial uses of water; however, an additional amendment to Chapter 2 of the Basin Plan is required to make the following updates to the chapter and table:

- Add designations for the new Subsistence Fishing (FISH) use to specific Hydrologic Areas (HAs) and Hydrologic Sub-areas (HSAs) in Table 2-1.
- Add additional designations for the new Native American Cultural use to specific HAs and HSAs in Table 2-1.
- Delineate wetlands in the region and add designations for specific wetland areas to Table 2-1.
- Delineate groundwater basins in the region and designate beneficial uses to the specific basins (add Table 2-2).

Staff Recommendation:
Maintain on the 2011 Triennial Review List.

Task 15: Consider Ammonia Objectives

Status: No work begun.

Background:
USEPA published the *Update of Ambient Water Quality Criteria for Ammonia* in 1999. This contains USEPA's most recent freshwater aquatic life criteria for ammonia, superseding all previous USEPA freshwater criteria for ammonia. The 1999 Ammonia Update pertains only to freshwater. It does not change or supersede the USEPA's aquatic life criterion for ammonia in salt water, published in *Ambient Water Quality Criteria for Ammonia* (saltwater) in 1989.

In July 2004, USEPA notified the public of their intent to re-evaluate the existing aquatic life criteria for ammonia to determine if a revision was warranted based on new toxicity data for aquatic organisms. They also solicited additional pertinent toxicity data or information that could be useful in re-evaluating those criteria. The fact sheet for the 2004 re-evaluation notice can be found on U.S. EPA's website at: www.epa.gov/waterscience/criteria/ammonia/.

After querying permitting staff, it appears that the existing Toxicity and Chemical Constituents objectives provide the necessary regulatory framework to include "ammonia" limits into permits and other orders.

Staff Recommendation:
Remove from 2011 Triennial Review List.

Status of the Remaining Issues on the 2007 Triennial Review List (Task 16 to 29)

None of the fourteen tasks, described below, were scheduled for Regional Water Board staff investigation during the 2007 to 2010 planning time frame. However, the issues are still of importance to the Region and work has proceeded by other parties in the intervening years. The following updates are provided to allow the Regional Water Board to consider these issues during their priority setting.

Task 16: Consider Update of Nutrient Objectives

Status: No work begun.

Background:
State Water Control is developing nutrient water quality objectives using an approach known as the California Nutrient Numeric Endpoint (NNE) framework. The NNE approach establishes a suite of numeric endpoints based on the ecological response of

an aquatic waterbody to nutrient over-enrichment (eutrophication, e.g., algal biomass, dissolved oxygen). The NNE approach is intended to serve as numeric guidance to translate narrative water quality objectives. The NNE approach is currently under development for estuaries, with selection of appropriate ecological response indicators as the first step in developing an NNE assessment framework

The California NNE technical approach utilizes predicted benthic algae biomass and chlorophyll *a* concentrations as "response variables" to define Beneficial Use Risk Categories that can serve as preliminary numeric targets. These numeric targets are set at a conservative level to account for uncertainty and to be applicable throughout California

The California NNE approach will be submitted for formal a peer review by the State Water Board. A scoping meeting is planned in August 2011. Phase I of the policy (for inland waters) could be complete by the end of 2011; Phase II for Bays and estuaries will be completed later.

Staff Recommendation:
Maintain on 2011 Triennial Review Short List. Defer action pending development of State Water Board's statewide objective(s).

Task 17: Develop a Road Management Policy

Status: No work begun

Background
Regional Water Board staff have decided not to pursue development of a regional road management policy for the Board's consideration. Alternatively, the Regional Water Board is currently developing coverage for road systems in the North Coast Region by using a combination of waste discharge requirements (WDRs), waivers of WDRs, and prohibitions in compliance with the 2004 State Nonpoint Source Policy. Due to recent court decisions, owners and operators of forestland roads may soon be required to seek enrollment under point source permits (NPDES).

Private timberland roads are either covered on a harvest plan by harvest plan approach (General WDRs and Non-Federal Timber Waiver), or under watershed WDRs (i.e. Elk River and Freshwater Creek) or ownership WDRs (Green Diamond Resource Company ownership-wide roads WDR). The road system on the lands managed by the US Forest Service are covered under the conditional waiver authorized under Order R1-2010- 029. More specific information on this issue is available for viewing and download from the Regional Water Board's website at:
http://www.waterboards.ca.gov/northcoast/water_issues/programs/timber_operations/.

Regional Water Board staff is also developing a conditional waiver to address nonpoint discharges from County road systems. Staff is using the Five Counties Salmon Conservation Program as a basis for the waiver. An update on this issue was provided to the Regional Water Board in March 2011.

As described above, under Task 1 and 2, as part of the Klamath River TMDLS the Regional Water Board adopted a waste discharge prohibition on all "unpermitted" waste that is applicable to the entire Klamath River Basin, which is over half of the North Coast Region.

Using the various regulatory tools available, the Regional Water Board is addressing discharge from road systems using regulatory tools outside of the basin planning process.

Staff Recommendation:
Remove from 2011 Triennial Review List.

Task 18 Designate Wild and Outstanding National Resource Waters

Status: No work begun

Background:
In 2007, the Environmental Law Foundation and several environmental organizations formally requested, in the form of a petition, that a number of Regional Water Boards designate several river segments as Outstanding Natural Resource Waters (ONRW). The request for ONRW designation included those river segments currently designated as "Wild and Scenic" under California's Wild and Scenic River Act (Public Resources Code § 5093.50 -.70). In a letter, dated May 8, 2007, State Water Board staff on behalf of the petitioned regions stated that these requests will be evaluated individually during the region's Triennial Review process.

Staff Recommendation:
Maintain on 2011 Triennial Review List.

Task 19: Adopt Chlorine Objectives

Status: No work begun.

Background:
A *Total Residual Chlorine and Chlorine-Produced Oxidants Policy of California* is being developed by State Water Board. The policy will be applicable to any dischargers using chlorine in its processes. The proposed statewide policy will establish objectives for Total Residual Chlorine and Chlorine Produced-Oxidants for inland surface waters, enclosed bays, and estuaries. Consistent statewide procedures are being created to

provide regulation in NPDES permits and equitable compliance determination to adequately enforce violations of chlorine excursions.

Staff Recommendation:
Maintain on 2011 Triennial Review List. Defer staff action pending development of State Water Board's statewide objective(s).

Task 20: Adopt Biocriteria Objectives

Status: No work begun.

Background:
The State Water Board is beginning to develop biological objectives (biocriteria) for freshwater streams and rivers in California. Biological objectives will include the narrative or numeric benchmarks that describe conditions necessary to protect aquatic life beneficial uses. Documents produced by the State Water Board on this issue can be viewed and downloaded at:
http://www.waterboards.ca.gov/plans_policies/biological_objective.shtml.

Staff Recommendation:
Maintain on 2011 Triennial Review List. Defer staff action pending development of State Water Board's statewide objective(s).

Task 21: Evaluate Objective for Turbidity

Status: No work begun.

Background
Regional Water Board staff are not aware of any interest in revising the existing turbidity objective from the permitted community. However, concern has been expressed about how the turbidity objective (and other sediment related objectives) can adversely affect restoration projects. This concern has been raised in terms of the Trinity River Restoration Program and the potential decommissioning of dams on the Klamath River. At issue is the certainty with which restoration projects can be permitted, even if they result in short-term exceedances of sediment objectives or violation of the Logging, Construction and Related Activities discharge prohibitions. Regional Water Board staff is developing an "Aquatic System Restoration Policy" (Task 11) to articulate the Regional Water Board's existing ability to permit these types of projects, to voice support for restoration generally, and to describe mechanisms by which to provide greater permitting certainty.

Staff Recommendation:
Remove from 2011 Triennial Review List.

Task 22: Revise Onsite Wastewater Policy

Status: State Water Board Lead

Background:
The State Water Board is currently drafting a new policy to meet the legal mandate (AB 885) that requires the development of statewide regulations or standards for onsite wastewater treatment facilities (septic systems). The proposed policy is being developed based on feedback received on prior proposed regulations, as well as feedback provided during the 2011 scoping period, and future public comment periods.

The State Water Board documents related to this issue can be viewed and downloaded at: http://www.waterboards.ca.gov/water_issues/programs/owts/index.shtml.

Staff Recommendation:
Maintain on 2011 Triennial Review List. Defer action pending development of State Water Board policy, which will likely require revision to some portion of the existing OSWT Policy currently in the Basin Plan.

Task 23: Revise Fluoride Objective

Status: No work begun

Background:
The fluoride water quality objective presently listed in the Basin Plan, specified as optimum fluoride concentrations for surface waters, are temperature-based and range from 0.6 to 2.4 mg/l (Table 3-2). In September 2003, the California Department of Health Services (DHS) adopted a maximum level for fluoride of 2.0 parts per million. In addition, USEPA announced in January 2011, that it is initiating a review of the water quality criteria for fluoride based on new information related to human health. This review is at least in part due to the U.S. Department of Health and Human Services proposal that the recommended level of fluoride in drinking water can be set at the lowest end of the current optimal range to prevent tooth decay.

The BPA being developed under Task 6 is proposing to delete Table 3-2 (which includes the fluoride levels) and replacing it with a “Policy on the Application of Narrative Objectives”. While there will be no specific objective for fluoride in the Basin Plan the existing narrative Chemical Constituent objective will address this constituent.

Staff Recommendation:
Delete from 2011 Triennial List.

Task 24: Adopt Mercury Implementation

Status: State Water Board lead

Background:
The State Water Board is developing a statewide methylmercury policy that would apply to inland surface waters, enclosed bays, and estuaries. The proposed policy is based on USEPA fish tissue based criteria. The proposed policy may contain a methylmercury fish tissue objective, a total mercury water quality objective, a methylmercury water quality objective, or some combination thereof. Implementation measures for use in permits may also be included.

Staff Recommendation:
Maintain on 2011 Triennial Review List. Defer staff action pending development of State Water Board's statewide objective(s).

Task 25: Consider Endocrine Disruptors and Objectives

Status: State Water Board in Lead, CEC Advisory Panel

Background:
As required by the Recycled Water Policy, the State Water Board convened an Advisory Panel to address questions about regulating constituents of emerging concern (CECs) with respect to the use of recycled water. CECs include endocrine disrupting substances. The Advisory Panel was charged with providing guidance in the developing of monitoring programs designed to assess potential CEC threats from various water recycling practices. On June 25, 2010, the CEC Advisory Panel provided recommendations to the State Water Board and California Department of Public Health in their Final Report.

This report and other supporting documents are available at the State Water Board's website at:
http://www.waterboards.ca.gov/water_issues/programs/water_recycling_policy/recycledwater_cec.shtml

Staff Recommendation:
Maintain on 2011 Triennial Review List. Defer action pending State Water Board direction.

Task 26: Revisions to Herbicide Application Policy

Status: No work begun.

Background:
The Basin Plan currently contains a Policy and *Action Plan for Control of Discharges of Herbicide Wastes from Silvicultural Applications*. The policy is specific to aerial application of herbicides following silviculture operations. There has been no recent interest expressed by industrial forestland owners and managers in revisions to this program.

Staff Recommendation:
Remove from the 2011 Triennial Review List.

Task 27: Address Composting Operations

Status: Issue is being included in Task 6 BPA

Background:
Formally, composting operations could enroll in the State Water Board's "General Conditional Waiver for Compost Operations". This waiver was expired and has not yet been replaced. As part of the groundwater protection program being developed for Task 6, Regional Water Board staff are proposing the development of Action Plans to control the discharge of waste from land applications, such as composting operations.

Staff Recommendation:
Remove from 2011 Triennial Review List. Addressed as part of the BPA work undertaken as part of Task 6

Task 28: Consider Seasonal Beneficial Uses and Objectives

Status: To be addressed, in part, under Task 5 (Chapter 2)

Background:
This issue relates to the effect of "seasonality", such as high winter flow conditions, on a discharger's compliance with numeric water quality objectives. As part of the editorial amendment work being developed for Chapter 2 – Beneficial Uses, staff is recommending some clarify language regarding "seasonality". Example of clarifying language being developed for the editorial amendment is as follows "Many beneficial uses are subject to seasonal cycles and variations. An example is a waterbody that supports a seasonal migration as of anadromous fish (MIGR) in fall and winter and is used for recreational swimming (REC-1) in summer. Recognizing the seasonality of these beneficial uses, the water quality is to be protected to support the uses during the season of the beneficial uses".

Staff Recommendation:
Remove from 2011 Triennial Review List.

Task 29: Update Garcia River TMDL Action Plan.

Status: No work undertaken

Background:
The language contained in the Basin Plan in the Garcia River TMDL Action Plan states that "Interested persons will have the opportunity to comment on the progress of the Action Plan at watershed meetings, and to the Regional Water Board at least once every 3 years, at which time the Regional Water Board shall determine if there is sufficient progress toward implementation of erosion control and management activities, as well as movement towards attainment of the Numeric Targets described in the Action Plan".

Periodic updates, from both staff and interested parties, have been given to the Regional Water Board since the TMDL became regulation in 2003. There has been no specific request from the Regional Water Board, staff, or the interested public to reopen the Action Plan for amendment. Significant progress is being made through the implementation of the TMDL. Regional Water Board staff believe this progress is continuing to improve instream habitat conditions and restore the beneficial uses of the Garcia River.

Staff Recommendation:
Remove from the 2011 Triennial Review List.

Issues Raised Since Adoption of the 2007 Triennial Review List

Issues related to inadequacies in the standards and implementation programs contained in the existing Basin Plan have been brought to Regional Water Board staff's attention since adoption of the 2007 Triennial Review List. These issues, as well as the issues that arise as part of the public solicitation process, will be included on the proposed 2011 Triennial Review List.

pH Objective

Background:
The Regional Water Board has been asked to relax the Basin Plan standard for pH from 6.5 to the USEPA standard of 6.0. Section 301(b)(1)(c) of the Clean Water Act (CWA) and section 122.44(d) of the federal regulations requires that NPDES permits to specify effluent limitations more stringent than technology-based effluent limitations, if necessary to achieve water quality standards set forth in the Basin Plan. In addition, sections 402(o)(2) and 303(d)(4) of the CWA and section 122.44(l) of the federal regulations prohibit backsliding in NPDES permits.

These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. Information and/or circumstances necessary to satisfy requirements for consideration of relaxed limitations has not been provided to the Regional Water Board.

Staff Recommendation
Add to 2011 Triennial Review List.

Radioactivity Objective

Background:
As part of their approval process for the North Coast Region's *Low Threat Discharge Amendment*, the State Water Board was requested to address the issue of radioactivity in regards to recycled water and potential to surface waters. Regional Water Board staff has also received comments relative to potential impacts to municipal drinking water supplies from radioactivity material released into the waste stream from medical treatments, etc.

The proposed revisions to the Radioactivity objective, being developed under Task 6, will ensure that as relative limits are established or revised, they will be used in Regional Water Board permits and other orders.

Regional Water Board permitting staff are also discussing the appropriateness of including specific monitoring requirements for these constituents during permit development and renewals.

Staff Recommendation:
No action required at this time.

Table 3-1 revisions

Background:
In a letter dated January 31, 2011 the City of Healdsburg offered to provide its technical services and resources to facilitate a revision of the Upper Russian River objectives for specific conductance and total dissolved solids. See discussion above on pH objective for more information on permit requirements and anti-backsliding, etc.

Staff Recommendation
Add to 2011 Triennial Review List. Ranking should consider the offer of third party resource help.

Toxicity Objectives

Background:
Regional Water Board staff has been requested to propose a revision to the Toxicity objective for surface water by removing the term 'acute'. The current language states "effluent limits based on acute bioassays of effluents will be prescribed." This language does not reflect the need to also consider the results of chronic toxicity bioassays. The language should be modified to reflect that effluent limits will be prescribed based on bioassays of effluent.

Staff Recommendation:
Add to 2011 Triennial Review List.

2011 Triennial Review Schedule

Following release of this *Initial Staff Report for the 2011 Triennial Review*, a workshop will be held at the June 22, 2011 Regional Water Board meeting. The workshop will be used to update the Board and the public on the status of the basin planning related work accomplished to date and staff's recommended approach to the 2011 Triennial Review. Regional Water Board staff will solicit comments from the Board and the public on issues to be included in the 2011 Triennial Review and the inclusion of issues on the "Short List".

The public comment period will be open following release of the Initial Staff Report until about 30 days before the Regional Water Board hearing, tentatively scheduled for September 29, 2011.

Following the close of the comment period, Regional Water Board staff will prepare a Staff Report and Triennial Review List which summarizes the input received from the public during the solicitation period. The final report will propose a "Short List" of potential Basin Plan amendments and a work schedule for the 2011 to 2014 time frame. The *Staff Report for the 2011 Triennial Review* is scheduled to be released in mid August 2011.

The adoption hearing is tentatively scheduled for the September 29, 2011 Regional Water Board meeting. At that time, the Regional Water Board may adopt the propose *2011 Triennial Review List* and the *Short List of 2011 Triennial Review Issues*, adopt revised lists, or extend the public hearing for further consideration and adoption at a later date.

After the *2011 Triennial Review List* and *Short List of 2011 Triennial Review Issues* are adopted, the Regional Water Board will submit it to the State Water Board, which will in turn forward the results of the Triennial Review to the USEPA.

Comparison List of 2007 Triennial Review Issues and Proposed 2011 Triennial Review Issues

The following table provides a crosswalk between the 2007 Triennial Review issues and the 2011 Triennial Review issues.

Crosswalk of 2007 and Proposed 2011 Triennial Review Issues

	2007 Triennial Review Issues	2011 List	2011 Short List	Comments
1	Adopt TMDL Implementation Strategies (add Action plans for Klamath, Elk and Freshwater)	Yes	Yes	Elk Sediment Action Plan (AP) Freshwater Sediment AP Laguna BU/WQO/AP Russian BU/WQO/AP Eel Temp AP Mattole Temp AP Navarro Temp AP
2	Complete Regionwide Excess Sediment Amendment	No		Complete for Klamath Basin North Coast Basin included in Task 6
3	Complete Stream & Wetlands System Protection Policy	Yes		Region 2 Lead
4	Complete Low Threat Discharge	No		Completed
5	Complete Editorial Amendment	No		Completed or in Task 6
6	Adopt Narrative Objective for Groundwater/Surface Water Policy	Yes	Yes	Rename for 2011 List: *Ground/Surface Water Objectives – Implementation Plan*
7	Revise Dissolved Oxygen Objective	Yes	Yes	
8	Adopt Freshwater Bacteria Objective	Yes		State Lead
9	Update Hatcheries Policy	Yes		
10	Adopt Instream Flow Objective.	Yes		
11	Adopt Exemption Criteria for Restoration Projects	Yes	Yes	Rename for 2011 List: *Aquatic EcoySystem Restoration Policy*
12	Adopt Policy for Mixing Zones	Yes		
13	Reevaluate Temperature Objective to Ensure Protection of Aquatic Life	Yes	Yes	Rename for 2011 List: *Temperature Implementation Policy*
14	Update Beneficial Use Chapter – Table 2-1	Yes		

15	Consider Ammonia Objective	No		
16	Consider Nutrients Objective	Yes		State Lead
17	Adopt Roads Management Policy	No		Writing county roads permit
18	Designate Outstanding Natural Resource Waters	Yes		
19	Adopt Chlorine Objective	Yes		State Lead
20	Adopt Biological Objective	Yes		State Lead
21	Evaluate Turbidity Objective	No		
22	Revise Onsite Waste Treatment Policy	Yes		State Lead
23	Revise Fluoride Objective	No		
24	Adopt Mercury Objective and Implementation Plan	Yes		State Lead
25	Consider Endocrine Disruptors Related Objective.	Yes		State Lead
26	Revisions to Herbicide Policy	No		
27	Address Composting Operations	No		
28	Consider Seasonal Beneficial Uses	No		
29	Update Garcia TMDL Action Plan	No		

Staff Recommendations for the Proposed 2011 Triennial Review List

Regional Water Board staff's recommendation on the proposed *2011 Triennial Review List* is presented below. The relative ranking, as proposed in the list, provides staff's best estimate on the status of the work related to being a formal Basin Plan amendment to the RWWB for their considerations. Issues included on the proposed *Short List of 2011 Triennial Review Issues* are those issues staff believes can be brought to the Regional Water Board in the next three year frame.

Proposed 2011 Triennial Review List

	2011 Issues (2007 TR Task No.)	2011 Short List	Comments
1	TMDL-Related BPAs (BU/WQO/AP) (1)	Yes	Elk Sediment Freshwater Sediment Laguna DO, etc Russian Pathogen Mattole Temperature Navarro Temperature Eel Temperature
2	Temperature Implementation Policy (13)	Yes	Consent decree
3	Ground/Surface Water Objectives – Implementation Plan (6)	Yes	
4	Dissolved Oxygen Objectives (7)	Yes	Already done for Mainstem Klamath River SSO
5	Aquatic System Restoration Policy (11)	Yes	
6	Stream & Wetlands Policy (3)		Region 2 Lead
7	Instream Flow Objectives (10)		
8	Mixing Zone for Human Heath Constituents (12)		
9	Hatcheries Policy (9)		
10	Table 2-1 - Beneficial Uses (14)		
11	Outstanding Natural Resource Waters (18)		
12	Toxicity Objectives		New Issue since 2007
13	pH Objectives		New Issue since 2007
14	Table 3-1 for Upper Russian River		New Issue since 2007
15	Freshwater Bacteria Objectives (8)		State Lead
16	Nutrients Objectives (16)		State Lead
17	Chlorine Objectives (19)		State Lead

18	Biological Objectives (20)		State Lead
19	Onsite Waste Treatment (22)		State Lead
20	Mercury Objectives and Imp (24)		State Lead
21	Endocrine Disruptor Objectives		State Lead on monitoring under Recycled Water Policy

Proposed Short List of 2011 Triennial Review Issues

	2011 Short List Issue (2007 TR Task No.)	**Tentative Hearing Schedule**	**Comment**
	TMDL BU/WQO/AP (1)	Elk 2011 Freshwater 2012 Eel 2013 Mattole 2013 Navarro 2013 Laguna 2013 Russian 2014	
	Temperature Implementation Policy (13)	2013	
	Groundwater/Surface Water Objectives and Implementation (6)	2012	
	Dissolved Oxygen Objective (7)	2012	
	Aquatic System Restoration Policy (11)	2011	

Summary

The public comment period on the proposed 2011 Triennial Review process, including issues to be included on the *2011 Triennial Review List* and the *Short List of 2011 Triennial Review Issues* will be open from early June 2011 until about three weeks before the Regional Water Board is scheduled to formally consider the proposed *2011 Triennial Review List* and the *Short List of 2011 Triennial Review Issues*. More information on the triennial review, including public review process and the proposed schedule for the 2011 Triennial Review can be viewed and downloaded at the Regional Water Board's website at: http://www.waterboards.ca.gov/northcoast/water_issues/programs/basin_plan/triennial_review.shtml