

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
NORTH COAST REGION**

**RESOLUTION NO. R1-2010-0026**

**Amending the Water Quality Control Plan for the North Coast Region  
to Include the**

**Action Plan for the  
Klamath River Total Maximum Daily Loads  
Addressing Temperature, Dissolved Oxygen,  
Nutrient, and Microcystin Impairments  
in the Klamath River in California  
and the Lost River Implementation Plan**

WHEREAS, the California Water Quality Control Board, North Coast Region (Regional Water Board) finds that:

1. The *Water Quality Control Plan for the North Coast Region* (Basin Plan) designates the beneficial uses of waterbodies within the North Coast Region. The Basin Plan also establishes water quality objectives in the North Coast Region including objectives for water temperature, dissolved oxygen (DO), biostimulatory substances, and toxicity. The beneficial uses of waterbodies, water quality objectives, and implementation programs such as the state and federal antidegradation policies, together, constitute water quality standards.
2. Section 303(d) of the Clean Water Act requires states to identify waters that do not meet applicable water quality standards and further requires the United States Environmental Protection Agency (USEPA) to list such waters on the 303(d) List of Water Quality Limited Segments (303(d) List). Section 303(d) of the Clean Water Act also requires states to address waters on the 303(d) List by developing a total maximum daily load (TMDL) that establishes levels necessary to attain applicable water quality standards with seasonal variations and a margin of safety. A TMDL is defined as the sum of the individual waste load allocations for point sources, and load allocations for nonpoint sources and natural background. (40 CFR § 130.2.)
3. Federal regulations (40 CFR § 122) require that NPDES permits (for point source discharges) be revised to be consistent with any approved TMDL waste load allocation. Under Clean Water Act section 303(d)(2), once USEPA approves or issues a TMDL, the state must incorporate the TMDL into its water quality management plan, which includes regional basin plans, but also consists of Clean Water Act section 208 plans, governing area wide waste treatment management, and plans developed as part of the state's continuing planning process under Clean Water Act section 303(e). Under the state's Porter-Cologne Water Quality Control Act (Wat. Code, § 13000 et seq.), the Regional Water Board must include an implementation plan when it adopts a TMDL as a Basin Plan amendment.
4. The Klamath River is listed on the current 2006 303(d) List, as updated May 29, 2008, due to several impairments. The portion of the Klamath River within California (Middle Hydrologic Area [HA] - Oregon to Trinity River, and Lower HA

- Klamath Glen Hydrologic Subarea (HAS)) is listed due to elevated water temperatures, elevated nutrients, and organic enrichment/low dissolved oxygen. The Klamath River Lower Hydrologic Area - Klamath Glen Hydrologic Subarea is listed due to sedimentation/siltation. The portion of the Middle Klamath River Hydrologic Area that incorporates Copco 1 Reservoir, Copco 2 Reservoir, Iron Gate Reservoir, and the riverine reach between the three reservoirs is listed due to the blue-green algae toxin microcystin. In addition, on June 3, 2009, the Regional Water Board adopted the 2008/2010 303(d) List which, once approved by the USEPA, will expand the sediment and microcystin listings in the Klamath River within California.
5. The Tule Lake and Mount Dome Hydrologic Subareas of the Lower Lost River watershed are listed on the current 2006 303(d) List due to nutrients. Also within the Lower Lost River watershed, Tule Lake and the Lower Klamath Lake National Wildlife Refuge are listed on the current 2006 303(d) List due to pH. The Lost River is part of the Klamath River Hydrologic Unit.
  6. The Klamath River originates in southern Oregon and flows through northern California to meet the Pacific Ocean at Requa in Del Norte County, California. Forty-four percent of the watershed lies within the boundaries of Oregon, while the remaining 56% of the basin lies within the boundaries of California. The Klamath River basin is of vital economic and cultural importance to the states of Oregon and California, as well as the Klamath Tribes in Oregon; the Hoopa, Karuk, and Yurok Tribes in California; the Quartz Valley Indian Reservation in California, and the Resighini Rancheria in California. It provides fertile lands for a rich agricultural economy in the upper basin. Irrigation facilities within the U.S. Bureau of Reclamation's Klamath Project support this economy, as does hydroelectric power provided via a system of five dams operated by PacifiCorp. The basin is the home spawning grounds of a once vast Tribal, sport, and commercial fishery and provides other aquatic resources of cultural significance to the local Indian Tribes. The watershed supports an active recreational industry, including activities that are specific to the Wild and Scenic portions of the river designated by both the state and federal governments in both Oregon and California. Finally, the watershed continues to support what were once more significant mining and timber industries.
  7. In the California portion of the Klamath River increased water temperatures, elevated nutrient levels, low dissolved oxygen concentrations, elevated pH, potential ammonia toxicity, increased incidence of fish disease, an abundance of aquatic plant growth, high chlorophyll-a levels (both planktonic and periphytic algae), and high concentrations of potentially toxicogenic blue-green algae, particularly in the impounded reaches, decrease the quality and quantity of suitable habitat for fish and aquatic life, and have disrupted traditional cultural uses of the river by resident Tribes. These conditions contribute to the nonattainment of beneficial uses, including the most sensitive beneficial uses: those associated with the cold water salmonid fisheries, cultural uses and practices, and recreation.

8. The USEPA established the *Lost River, California, Total Maximum Daily Loads for Nitrogen and Biochemical Oxygen Demand to address Dissolved Oxygen and pH Impairments* on December 30, 2008, which applies to the portion of the Lost River in the Mount Dome Hydrologic Subarea and the Tule Lake Hydrologic Subarea, together known as the Lower Lost River. The USEPA-established Lower Lost River TMDLs do not include an implementation plan.
9. A consent decree entered into by the USEPA in March 1997 (*Pacific Coast Federation of Fishermen's Associations et al. v. Marcus*) establishes the date by which TMDLs for seventeen North Coast California watersheds must be completed. The Klamath River TMDLs for the listed temperature and nutrient impairments were scheduled for completion by 2007. Negotiations between USEPA and the plaintiffs resulted in an extension of that deadline to December 2010.
10. The Regional Water Board worked cooperatively with the Oregon Department of Environmental Quality (ODEQ) and USEPA Regions 9 and 10 to develop TMDLs for the water quality impaired waterbodies in the Klamath River from Link River in Oregon to the Pacific Ocean, and the Lost River, including the Klamath Straits Drain and Lost River Diversion Channel.
11. As detailed in Resolution R1-2010-0025, the Regional Water Board has recalculated the site specific water quality objectives for DO consistent with the analysis for developing the TMDLs.
12. The *Action Plan for the Klamath River Total Maximum Daily Loads Addressing Temperature, Dissolved Oxygen, Nutrient, and Microcystin Impairments in the Klamath River in California and the Lost River Implementation Plan*, hereinafter known as the Action Plan (attached to this Resolution as Attachment 1) includes: 1) the Klamath River TMDLs addressing temperature, dissolved oxygen, nutrient, and microcystin impairments in the Klamath River in California (Middle HA - Oregon to Trinity River, and Lower HA, Klamath Glen HSA -Trinity River to Pacific Ocean), and 2) includes an implementation plan applicable to actions within the Klamath River basin, including the Lower Lost River watershed of California. The implementation plan will implement the Klamath River TMDLs and the USEPA-established Lower Lost River TMDL.
13. In developing the implementation plan, the Regional Water Board considered the nature of the discharges in the Klamath River basin as well as existing efforts to protect and restore water quality in the basin. Many individuals, groups, and agencies have been working to enhance and restore fish habitat and water quality of the Klamath River Basin in California. These groups include, but are not limited to NOAA-Fisheries, the United States Bureau of Reclamation, the United States Fish and Wildlife Service, the United States Forest Service, the Klamath River Basin Fisheries Task Force, the California Department of Fish and Game, the California Department of Water Resources, the Hoopa Valley Tribe, the Karuk Tribe, the Klamath Tribe, the Quartz Valley Indian Reservation, the Resighini Rancheria, the Yurok Tribe, resource conservation districts, irrigation

districts, watershed groups, companies, non-governmental organizations, and individuals. Their past and present efforts have improved water quality conditions in the Klamath River and its tributaries.

14. The implementation plan proposes discrete and identifiable implementation measures that will bring the waterbody into compliance and identifies the parties responsible for implementing those measures. It also describes the Regional Water Board's current regulatory strategy for controlling pollutant sources, recommends improvements to existing regulatory controls, and describes the recommended approach to controlling pollutant sources where traditional implementation controls may not apply or where the Regional Water Board lacks implementing jurisdiction. The plan sets time schedules by which the responsible parties will implement compliance measures and also includes a monitoring plan to track progress towards compliance.
15. Restoration of water quality of the Klamath River requires coordinated basinwide implementation of TMDLs. The implementation plan includes the following measures to achieve this goal:
  - A Memorandum of Agreement to coordinate implementation with the Oregon DEQ and USEPA Regions 9 and 10;
  - Development of a Management Agency Agreement with the US Bureau of Reclamation, US Fish and Wildlife Service, and Tulelake Irrigation District;
  - Measures to address the water quality impacts from the Klamath Hydroelectric Project;
  - Incorporation of Klamath TMDL requirements into point and nonpoint source permits as appropriate, including timber harvest permits and region-wide permits for Caltrans and the USFS;
  - Developing a conditional waiver for maintenance of county roads certifying the Five County Salmonid Conservation Program to address sediment discharges from county roads;
  - Development of a conditional waiver by 2012 for discharges associated with agricultural activities, including grazing and irrigated agriculture;
  - Thermal Refugia Protection Policy; and
  - Prohibition against unauthorized discharge of waste that violate water quality standards.
16. During development of the Klamath River TMDLs, the water quality models underwent external peer review. Peer review interactions during 2005 and 2006 focused on the water quality model and its application to the Klamath River. The draft model was sent to the following parties for peer review in October 2005:
  - 1) Ms. Cindy Williams, Bureau of Reclamation (BOR), Klamath Falls, OR
  - 2) Mr. Merlynn Bender, Bureau of Reclamation, Denver, CO
  - 3) Dr. Scott Wells, Portland State University
  - 4) Mr. Michael Deas, Watercourse Engineering, Davis, CA
  - 5) Mr. Daniel Henninger, Brown & Caldwell, consultant to City of Klamath Falls

In the spring of 2009, the U.S. Geological Survey - Oregon Water Science Center, under contract to the U.S. Bureau of Reclamation, and in consultation with Watercourse Engineering, Inc., reviewed the Klamath River TMDL models, with a particular focus on the reach from Link River Dam to Keno Dam in Oregon.

17. The scientific basis of the Action Plan has been reviewed by external scientific peer reviewers in accordance with section 57004 of the California Health and Safety Code. Regional Water Board staff submitted a peer-review draft Staff Report in February 2009 to four external scientific peer reviewers: Dr. Gregory Characklis, Dr. G. Mathias Kondolf, Dr. Christopher A. Myrick, and Dr. Desiree Tullos. Regional Water Board staff revised the Action Plan and the Staff Report in response, or provided a written response that explained the basis for not making the suggested revisions.
18. Regional Water Board staff prepared a detailed technical document that analyzes and describes the specific necessity and rationale for the development of this amendment. The technical document entitled "Staff Report for the Klamath River Total Maximum Daily Loads (TMDLs) Addressing Temperature, Dissolved Oxygen, Nutrient, and Mycrocystin Impairments in California, The Klamath River Site Specific Dissolved Oxygen Objective, and the Klamath River and Lost River Implementation Plans" (Staff Report) is an integral part of this Regional Water Board action and was reviewed, considered, and accepted by the Regional Water Board before acting on March 24, 2010.
19. The Regional Water Board has provided extensive outreach and opportunity for public comment on this amendment. Since February 2004, stakeholder involvement pertaining to the Action Plan has occurred through numerous venues, including eighteen public meetings, at least twelve presentations to the Regional Water Board, at least seventeen presentations at other organization's meetings and conferences, an informational webpage, informational e-mails, correspondences, and public comment periods.
20. Drafts of the Action Plan and Staff Report were available for formal public review and comment on two separate occasions. The complete version of the Draft Action Plan, Staff Report, and substitute environmental documents were available for public review and comment on July 9, 2009. The public comment period closed on August 27, 2009, allowing a 50-day review and comment period. The second review and comment period of the entire revised Draft Action Plan, Staff Report, and substitute environmental documents opened on December 23, 2009, and closed on February 9, 2010, allowing a 47-day review and comment period. Regional Water Board staff received and responded to over 300 comment letters on drafts of the Action Plan, Staff Report, and substitute environmental documents.
21. In accordance with Water Code, section 13244, notice of Public Hearing was given to all interested parties and published on December 26, 2009 in the *Herald & News* out of Klamath Falls, OR; on December 24, 2009, in the *Press Democrat* out of Santa Rosa, CA; on December 24, 25, and 26, 2009, in the *Sacramento*

*Bee* out of Sacramento, CA; on December 23, 24, and 28, 2009 in the *Siskiyou Daily News* out of Yreka, CA; and on December 22, 23, and 24, 2009, in the *Times-Standard* out of Eureka, CA.

22. On March 24, 2010, the Regional Water Board held a public hearing to consider adoption of the Action Plan, including the substitute environmental documents and the comments received during the Basin Plan amendment process.
23. The Basin Plan Amendment is consistent with the provisions of the State Water Resources Control Board (State Water Board) Resolution No. 68-16, which is the "Statement of Policy with Respect to Maintaining High Quality Waters in California." Resolution No. 68-16 incorporates the federal Antidegradation Policy.
24. The Regional Water Board has considered the costs of implementing the Action Plan, and find these costs to be reasonable and minimal relative to the benefits derived from implementing the Action Plan.
25. Pursuant to Public Resources Code section 21080.5, the Resources Agency has approved the Regional Water Boards' basin planning process as a "certified regulatory program" that adequately satisfies the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.) requirements for preparing environmental documents. (Cal. Code Regs., tit. 14, § 15251, subd. (g); Cal. Code Regs., tit. 23, § 3782.) As such, the basin planning documents together with the Environmental Checklist, are the "substitute documents" that contain the required environmental documentation under CEQA. (Cal. Code Regs., tit. 23, § 3777.) The substitute environmental documents include the Staff Report, the environmental checklist and analyses, the comments and responses to comments, and the Basin Plan amendment language.
26. In preparing the accompanying substitute environmental documents, the Regional Water Board has considered the requirements of Public Resources Code section 21159 and California Code of Regulations, title 14, section 15187, and intends the substitute environmental documents to serve as a tier 1 environmental review. Many of the compliance obligations will be undertaken or approved by public agencies that will have separate obligations under CEQA. Project level impacts will need to be considered in any subsequent environmental analysis performed by other public agencies, pursuant to Public Resources Code section 21159.2.
27. The adoption of the Action Plan as a Basin Plan amendment is a regulatory action subject to the requirements of section 21159 of the Public Resources Code. Consistent with the requirements of that section, the CEQA Environmental Checklist includes an analysis of environmental impacts, mitigation measures to reduce or avoid those impacts, and alternative means of compliance that would avoid or eliminate environmental impacts (Pub. Resources Code, § 21159, subd. (a)(1)-(3); Cal. Code Regs., tit. 14, §§ 15187, subds. (b), (c)(1)-(3), 15189.) The analysis in the CEQA Environmental Checklist

takes into account a reasonable range of environmental, economic, and technical factors. The analysis determined that the Action Plan will not have a significant adverse effect on the environment.

28. Consistent with the California Code of Regulations, title 23, sections 3778-80, Regional Water Board staff consulted with Tribes, stakeholders in the Region, and other potentially affected parties about the proposed action, and considered and addressed all comments.
29. After considering the documents and comments received during the public review process, the Regional Water Board hereby determines that the amendment, with the identified mitigation measures, will not have a significant effect on the environment. The Regional Water Board hereby certifies the substitute environmental documents prepared by Regional Water Board staff pursuant to section 21080.5 of the Public Resources Code. The documents and materials that constitute the record supporting the Regional Water Board's decision are located at the Regional Water Board office, maintained in a public file.
30. The Action Plan must be submitted for review and approval by the State Water Resources Control Board, then the State Office of Administrative Law, and finally the USEPA.
31. The implementation plan, enforcement, monitoring, and reassessment and adaptive management sections of the Action Plan will become effective upon submittal of the CEQA filing fee to the California Department of Fish and Game, which will be submitted following approval by the Office of Administrative Law. The remainder of the Action Plan, namely the Klamath River TMDLs, will become effective upon approval by the USEPA.
32. Occasionally during its approval process, Regional Water Board staff, State Board or OAL determines that minor, non-substantive corrections to the language of the amendment are needed for clarity and consistency. Under such circumstances, the Executive Officer should be authorized to make such changes, provided that the Board is informed of any such changes.

NOW, THEREFORE BE IT SO RESOLVED THAT, after considering the entire record, including oral testimony at the hearing,

1. Pursuant to section 13240 and 13242 of the Water Code, the Regional Water Board hereby adopts, as an amendment to the Basin Plan, the *Action Plan for the Klamath River Total Maximum Daily Loads Addressing Temperature, Dissolved Oxygen, Nutrient, and Microcystin Impairments and the Lost River Implementation Plan*, as set forth in Attachment 1 to this Resolution and as supported by the substitute environmental documents.
2. The Regional Water Board hereby determines that compliance with the Action Plan will attain and maintain applicable water quality objectives for water

temperature, dissolved oxygen, biostimulatory substances, and toxicity as it relates to the blue-green algae toxin microcystin, as well as restore and protect beneficial uses in the Middle and Lower Klamath River Hydrologic Areas and Lower Lost River of California.

3. The Executive Officer is hereby directed to forward copies of the Action Plan and the administrative record to the State Water Resources Control Board in accordance with the requirements of section 13245 of the California Water Code.
4. The Regional Water Board hereby requests the State Water Resources Control Board approve the Action Plan in accordance with sections 13245 and 13246 of the California Water Code, and forward the Action Plan to the Office of Administrative Law and the USEPA.
5. If, during the approval process, the State Water Resources Control Board or the Office of Administrative Law determines that minor, non-substantive corrections to the language of the Action Plan are needed for clarity or consistency, the Executive Officer may make such changes, and shall inform the Regional Water Board of any such changes.
6. The Executive Officer is hereby directed to file a Notice of Decision after the Action Plan is approved by the Office of Administrative Law, in accordance with section 21080.5(d)(2)(E) of the Public Resources Code and the California Code of Regulations, title 23, section 3781.

## **CERTIFICATION**

I, Catherine Kuhlman, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, North Coast Region, on March 24, 2010.

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Catherine Kuhlman  
Executive Officer