

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

RESOLUTION NO. R5-2010-0023

APPROVING
THE
TRIENNIAL REVIEW AND WORK PLAN
FOR
THE TULARE LAKE BASIN

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

1. In 1975 the Central Valley Water Board adopted the Water Quality Control Plan for the Tulare Lake Basin (Basin Plan), which has been amended occasionally.
2. The Basin Plan contains the Tulare Lake Basin's beneficial uses, water quality objectives and implementation programs.
3. Section 303(c) of the Clean Water Act (CWA) requires that water quality standards be reviewed at least every three years and section 13240 of the California Water Code requires periodic review. This review is known as the Triennial Review.
4. In accordance with State Water Resources Control Board (State Board) procedures for conducting a Triennial Review, Central Valley Water Board staff circulated a list of water quality issues and held a public workshop on 13 September 2007 to receive public comment regarding the list and other potential issues.
5. Central Valley Water Board staff responded to all comments and developed a final list of issues and a work plan to rank and address them.
6. The work plan lists potential water quality problems, the relative priority for investigating the problems, identifies which problems can be investigated with existing resources, and identifies additional problems along with the additional resources it will take to investigate and complete them.
7. Central Valley Water Board held a public hearing on 18 March 2010 in Rancho Cordova, California, to receive public comment on the ranking of issues and the proposed work plan for addressing them. Notice of the public hearing was sent to all interested persons and published in the manner described in California Government Code section 6061, and

consistent with state and federal environmental regulations (40 Code of Federal Regulations (CFR) Part 25, and 40 CFR § 131).

THEREFORE BE IT RESOLVED, that

1. The Central Valley Water Board hereby approves the response to comments and adopts the Triennial Review work plan described above, in accordance with the requirements of section 303(c)(1) of the CWA and section 13240 of the California Water Code.
2. The Central Valley Water Board reaffirms its intent to address the priority problems identified during the Triennial Review process as described in the work plan, to the extent resources allow.
3. The areas of the Basin Plan not identified as needing investigation and possible revision are hereby affirmed as adequate; however, this determination does not preclude the consideration of other issues for possible revision or amendment of the Basin Plan. The entire Basin Plan shall remain in effect until such time that appropriate and specific amendments on priority issues are adopted by the Central Valley Water Board and approved by the appropriate review authorities.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, Central Valley Region, on 18 March 2010.

original signed by
PAMELA C. CREEDON, Executive Officer

Issue List and Work Plan for the
2007 Triennial Review of the
Water Quality Control Plan for the Tulare Lake Basin

To meet requirements of section 303(c) of the Federal Clean Water Act and section 13240 of the California Water Code, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) reviews the water quality standards contained in the Water Quality Control Plan for the Tulare Lake Basin (Basin Plan) every three years. This Triennial Review (TR) consists of conducting a public workshop to receive comments on water quality problems in the Basin and preparing a work plan that describes the actions the Central Valley Water Board may take over the next three years to investigate and respond to the high priority issues. Implementation of the work plan depends upon the Central Valley Water Board's program priorities, resources, and other mandates and commitments. Crucial to successful implementation of the actions is adequate support of the Central Valley Water Board's Basin Plan activities.

The Central Valley Water Board began its current Triennial Review for the Tulare Lake Basin Plan by providing a 45-day public notice, culminating in a public workshop, to solicit comments on water quality problems. The public notice contained a brief description of some problems identified by staff. The notice was mailed to the 1,260 entities on the Basin Plan mailing list and emailed to 223 entities. A shorter notice was published for one-day in each of the four major newspapers covering the Tulare Lake Basin area.

The public workshop was held during the regularly scheduled Central Valley Water Board meeting on 13 September 2007 to receive oral comments. Comments submitted after the public workshop were also considered in this review. The Central Valley Water Board received a total of four written comments and eight verbal comments at the workshop. On 15 December 2009, a Draft Issue List and Work Plan was circulated for review, a total of seven written comments were received. Responses to these comments are attached.

The issues listed below reflect the water quality problems identified from public comments received during the review period and staff knowledge about problems in the Basin. The list of issues far exceeds the staff resources allocated to planning activities. Existing resources only allow a small portion of the highest priority issues to be addressed. By prioritizing the activities, the Central Valley Water Board identifies unfunded issues that the Central Valley Water Board will actively seek funding for and will accept funding to accomplish.

Two levels of actions are specified. Current Actions represent the staff's best judgment about what can be done from Fiscal Year (FY) 09/10 through FY 10/11 to address the issue with available resources. Additional Actions depend on more resources becoming available. The priority for each issue indicates the order to address the issues.

Based on the staff analysis, the following issues have been identified as high priority for the Tulare Lake Basin.

- Beneficial Use Designations
- Wetlands
- Salt and Nitrate Management Plan
- Groundwater Assessment and Control Programs

The issues selected for the Triennial Review represent major water quality concerns derived from what is currently known about them. Knowledge about pollution problems may change significantly from one year to the next.

Issue 1: Beneficial Use Designations

Discussion:

The Basin Plan designates beneficial uses to surface waters in three different ways: (1) Table II-1 lists beneficial uses that apply to surface waters of the basins; (2) The beneficial uses of any specifically listed water body generally apply to its tributary streams; and (3) The Basin Plan implements State Water Board Resolution 88-63 ("Sources of Drinking Water Policy") by assigning municipal and domestic supply uses (MUN) to all unlisted water bodies.

The Basin Plan states that all groundwaters in the Region are suitable or potentially suitable for municipal and domestic water supply (MUN), agricultural supply (AGR), industrial service supply (IND), and industrial process supply (PRO).

Commenters question the appropriateness of the designated beneficial uses. Adjustments to designated beneficial uses for surface and ground waters can only be made through the Basin Plan amendment process. Because all the water bodies in the region have designated beneficial uses, changes to beneficial uses that result in less stringent criteria must be supported by a use attainability analysis as described in 40 CFR 131.10(g).

The State Water Board determined in Order No. 2002-0015, "... where a Central Valley Water Board has evidence that a use neither exists nor likely can be feasibly attained, the Central Valley Water Board must expeditiously initiate appropriate basin plan amendments to consider dedesignating the use. Moreover, the Central Valley Water Board can require dischargers to the affected waterbody to provide assistance, through data collection, water quality-related investigations, or other appropriate means, to support and expedite the basin plan amendment process."

Comments received during the development of the 2008 Integrated Report of Federal Clean Water Act section 305(b) and section 303(d) list suggest that the beneficial uses be reviewed for the following water bodies: 1) COLD for Hume Lake; 2) COLD for Lake Isabella; 3) COLD for Kern River below Lake Isabella to Southern California Edison Kern River Powerhouse No.1; and 4) COLD for Poso Creek. Comments

received from staff suggest that the MUN beneficial use be reviewed for groundwater in various Kern County Westside oilfields.

Priority: High

Current Action: None

Current Resources: None

Additional Action: Because of the large number and size of the unlisted water bodies, developing a logical system of grouping some of the waterbodies and assigning beneficial uses to the groups would involve the most efficient use of resources. Staff would assemble and work with a stakeholder group to define the issues associated with any general classification system and to determine the best and most efficient approach to the assignment of beneficial uses. One possible conclusion of additional studies would be that categorizing the waterbodies will be technically infeasible and beneficial uses will need to be addressed on a site-specific basis. For example, perhaps COLD beneficial use only occurs above a certain elevation in streams with certain geomorphic characteristics. Potentially these streams would be candidates for dedesignating COLD. One amendment would be more cost effective than many separate amendments.

Information to group waterbodies may be assisted by addressing specific beneficial uses for Hume Lake, Lake Isabella, and the Kern River. Evaluation of the MUN beneficial uses in groundwater in various Kern County Westside oilfields could be an example of a grouped amendment.

Additional Resources
Requirements:

- 1) Staff – 0.5 PYs is needed each year for three years to address each waterbody and 1.0 PY is needed for the first year to further define the larger issue of grouping water bodies. Future needs would depend on the number of water body categories that are identified.
- 2) Contract(s) – Approximately \$500,000 is needed for each water body to provide the scientific justification and environmental analysis of addressing the beneficial uses. Approximately \$500,000 is needed to gather information on the groundwater in the Kern County Westside oilfields and develop the environmental analysis to address the beneficial

uses. Contract resource needs for grouping water bodies into logical categories to address in a single basin plan amendment would need to be developed with interested stakeholder groups.

Issue 2:

Wetlands

Discussion:

The Department of Fish and Game is concerned with the loss of wetlands through dredge and fill activities or the degradation of wetland habitat from discharges of constituents of concern (pesticides, salts, nutrients, etc.) to surface and/or groundwaters.

The State Water Board has adopted Resolution No. 2008-0026 to begin work on a statewide wetland and riparian area policy for future consideration. Clearly, there is a need for a strong statewide policy that provides both guidance on the protection and restoration of wetlands, as well as assessing and measuring net change in wetland functions.

Priority:

High

Current Action:

Central Valley Water Board staff is participating with State Water Board staff in the development of the Wetland and Riparian Area Protection Policy.

Current Resources:

- 1) Staff – 0.1 PY
- 2) Contract(s) -- None
- 3) Source(s) -- Water Quality Certification Program and Nonpoint Source Program.

Additional Action:

Coordinate with the Department of Fish and Game in areas of wetland damage, focusing on vernal pools within the Tulare Lake bed which may be affected by excess nutrients to delineate these areas of special concern and to develop a program to provide appropriate protection.

Additional Resource Requirements:

- 1) Staff – 0.5 PY per year
- 2) Contract(s) -- \$50,000 (lab analyses)
- 3) Source(s) – Existing Central Valley Water Board programs

Issue 3: Salt and Nitrate Management Plan

- Discussion:** Elevated salinity and nitrates in surface and ground waters in California's Central Valley is an increasing problem affecting much of California, other western states, and arid regions throughout the world. As surface and ground water supplies become scarcer, and as wastewater streams become more concentrated, salinity and nitrate impairments are occurring with greater frequency and magnitude. The Central Valley Water Board and State Water Board have initiated a comprehensive effort to address salinity and nitrate problems in California's Central Valley and adopt long-term solutions that will lead to enhanced water quality and economic sustainability. Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) is a collaborative basin planning effort aimed at developing and implementing a comprehensive salinity and nitrate management program. The goal of CV-SALTS is to maintain a healthy environment and a good quality of life for all Californians by protecting our most essential and vulnerable resource: WATER.
- Current Action:** Staff is working with stakeholders to compile existing data, build capacity in the stakeholder organization, and identify study needs to support this Salt and Nitrate Management Plan. A stakeholder-led Central Valley Salinity Coalition has formed to help fund the continuing effort and conduct the technical studies needed to update the Basin Plans to address salinity and nitrate on a regional basis within 5-7 years.
- Priority:** High
- Current Resources:**
- 1) Staff – 2.5 PYs
 - 2) Contract(s) -- \$1.2 million
 - 3) Source(s) -- Personnel resources are from the Basin Planning Program, the San Joaquin River Agricultural Unit, and Nonpoint Source Program with involvement from staff in the following programs: Basin Planning, TMDL, ILRP, Title 27, Non-15, SWAMP, and Cleanup. Contract resources are from the Cleanup and Abatement Account.
- Additional Action:** Current resources allow staff to participate with CV-SALTS and to start assessing salinity and nitrate concerns. Additional resources are necessary to complete assessment of these concerns, affirm beneficial uses, establish appropriately

protective water quality objectives and develop implementation programs to achieve the water quality objectives.

Wineries can produce substantial quantities of stillage waste which is high in concentrations of BOD, EC, TDS, and nitrogen. The Basin Plan includes guidelines for the disposal of stillage waste that are based on a study conducted in 1980. The Basin Plan notes that the guidelines represent minimum requirements for disposal of stillage waste from wineries and do not preclude the establishment of more stringent requirements to comply with water quality objectives. More recent information indicates that the guidelines do not adequately protect groundwater. The guidelines should be reviewed and, if necessary, they should be revised with more rigorous requirements to provide adequate groundwater protection. Evaluation of the guidelines must be done in coordination with CV-SALTS but can be a separate project that is part of the larger salt and nitrate management plans.

**Additional Resource
Requirements:**

- 1) Staff – 0.5 PYs per year to work on winery issues.
- 2) Contract(s) - \$50 million to work on salt and nitrate management plans. No contract resources needed for winery issues.
- 3) Source(s) – Stakeholder Contributions for the salt and nitrate management plans. Unknown source of resources for winery issues.

Issue 4:

Groundwater Assessment and Control Programs

Discussion:

The Basin Plan describes various groundwater quality problems that exist throughout the region and includes numerous policies that address prevention and cleanup of groundwater quality problems. There are programs in place that are designed to address localized problems (i.e., underground storage tank and site cleanup programs) but there has been no organized effort to address the wide spread problems of nitrates and salts. The Tulare Lake Basin is essentially a closed basin because surface water only drains north into the San Joaquin River Basin in years of extreme rainfall and because there is little subsurface outflow. Degradation of groundwater in the Tulare Lake Basin by salts is unavoidable without a plan for removing salts from the Basin. In the Basin Plan, the Central Valley Water Board considers a valleywide drain to be the best technical solution, but recognizes the drain is not imminent. The Basin Plan

recognizes the only other solution is to manage the rate of degradation by minimizing the salt loads to the groundwater body. A major effort is needed to assess the current conditions, determine the factors contributing to present groundwater impacts, and develop policies that can be used to correct existing problems and prevent future problems.

Nitrates. A 1988 State Water Board report to the State Legislature on Nitrates in Drinking Water (SWRCB, 1988) reported that 10 percent of the samples in STORET (the USEPA database) were above the primary Maximum Contaminant Level (10 mg/L nitrate-nitrogen). A geographical depiction of wells with levels of nitrate above background (greater than 4.5 mg/L nitrate-nitrogen) showed the highest densities in the Central Valley are close to the Highway 99 corridor and primarily around population centers (e.g., Modesto, Yuba City, Fresno, and Bakersfield) and concentrated animal confinement areas (e.g., feedlots and dairies). As noted above in Bulletin 118, nitrate is one of the most frequently-exceeded constituents in public supply wells.

The primary health concern is with the consumption of water with elevated nitrate which is the condition known as methemoglobinemia. Methemoglobinemia, more commonly known as the "blue baby syndrome," is the interference by nitrate to the absorption of oxygen by hemoglobin in the blood. Infants, younger than 6 months, are most susceptible and the oxygen deficit in the blood stream produces blue coloration of the lips and skin and hence the term "blue baby." More severe cases result in death. The health impacts to infants subject to chronic oxygen deprivation, as a result of nitrate consumption in drinking water, which do not result in mortality, are unknown. The condition is often misdiagnosed and is believed to be under reported. A survey of hospital discharge records by the Department of Health Services (DHS) between 1983 and 1995 revealed 97 cases of methemoglobinemia in children younger than one year. The database, however, was incomplete and it could not be determined how many cases were attributable to consumption of nitrate contaminated groundwater as other factors can also lead to this condition, such as aerosol deodorizers and certain pharmaceuticals.

The primary sources of nitrate in groundwater are application of nitrogen fertilizers, disposal or reuse of animal waste at confined animal production facilities, and individual sewer systems (septic systems).

Areas of intensive crop production in highly permeable soils, especially of crops with a high nitrogen demand (e.g., vegetables, citrus, and silage corn), are known or suspected of causing elevated nitrate levels in the groundwater (e.g., Salinas Valley, Chico Basin and Hilmar area of Merced County). Groundwater in crop production areas can become contaminated with nitrate when nitrogen fertilizers are applied at rates in excess of crop utilization and inefficient irrigation or high rainfall leach the nitrate to groundwater. Other factors that put groundwater at risk are a shallow aquifer, the absence of a restricting layer to vertical migration of nitrate, permeable soils, and poor well construction. The Irrigated Lands waiver may address some of these issues by starting the process of identifying impacts and requiring development and implementation of practices to reduce and/or eliminate the impacts.

Salt. Salts, as measured by Total Dissolved Solids (TDS) or electrical conductivity (EC) are of concern because they interfere with agricultural, industrial, and domestic beneficial uses of groundwater. However, salts are also of concern in surface waters. See Work Plan Issue No. 3 for a more detailed description of salinity issues.

Many of the water agencies within the Tulare Lake Basin have groundwater management plans which include monitoring programs. Staff should work with the water agencies to share information in protecting water quality and implement a modified network that might meet the Central Valley Water Board needs. Water agencies and staff should identify areas within the Tulare Lake Basin where the groundwater is adversely impacted by salts and chemicals to the extent that the groundwater no longer supports all its beneficial uses. Where presence of salts and chemicals are due to nonpoint source impacts and the source is not clear, investigations should be done to identify potential sources of these contaminants and practices should be developed to mitigate these impacts. Where areas of the Basin are threatened with increasing salinity, practices should be developed to reduce these impacts.

Priority:

High

Current Action:

The Supplemental Report of the 1999 Budget Act and later the Groundwater Quality Monitoring Act of 2001 required the State Water Board to develop a comprehensive ambient groundwater monitoring plan. To meet this mandate, the State Water Board created the Groundwater Ambient Monitoring and Assessment

(GAMA) Program. The primary objective of the GAMA Program is to comprehensively assess statewide groundwater quality and gain an understanding about contamination risk to specific groundwater resources.

The Central Valley Water Board has established the Groundwater Monitoring Advisory Workgroup (GMAW) whose primary goal is to provide input on matters related to groundwater monitoring. Specifically, the GMAW will advise and provide comments to Central Valley Water Board staff on technical issues related to how groundwater monitoring studies are conducted and evaluation of monitoring data. The GMAW will provide advice and comments on specific issues. However, specific sites or dischargers will not be discussed.

As mentioned in Work Plan Issue No. 3, CV-SALTS is engaged in activities involving salinity and nitrates. The CV-SALTS committees have indicated their willingness to assist staff as pieces of the groundwater strategy related to salinity and nitrate management are developed.

Current Resources:

- 1) Staff – 1 PY
- 2) Contract(s) - \$0
- 3) Source(s) – Existing Central Valley Water Board programs

Additional Action:

Monitoring collected under the GAMA program should be evaluated to determine what discharge activities are impacting groundwaters and to develop management practices to protect groundwater quality. A groundwater monitoring program specific to the Tulare Lake Basin should be developed to track trends in groundwater quality and to evaluate the effectiveness of implementation programs.

Monitoring data should be assessed to identify controllable sources and to provide the technical supporting documentation for basin plan implementation programs to control discharges that degrade groundwater quality. Strategies and implementation programs should maintain groundwaters as close to natural concentrations of dissolved matter as is reasonable considering careful use and management of water resources. Stakeholder groups should be convened to identify management measures that would reduce the amount of nitrates and salt leached to groundwater.

Additional Resource
Requirements:

- 1) Staff - 2 PYs per year for three years
- 2) Contract(s) -- \$1,000,000 to develop a groundwater monitoring program and conduct initial monitoring. \$500,000 per year to conduct a continuous groundwater monitoring program. \$100,000 per year for three years to help develop an implementation program to protect groundwater quality.

Issue 5:

Electrical Conductivity Effluent Limit

Discussion:

The Basin Plan contains electrical conductivity effluent limits for discharges of municipal and domestic, industrial, and oil field wastewaters. Municipal and domestic discharges are limited to the electrical conductivity (EC) of the source water plus 500 micromhos per centimeter ($\mu\text{mhos/cm}$).

Industrial dischargers are required to meet an EC limit of the source water plus 500 $\mu\text{mhos/cm}$ unless it can be demonstrated that allowing a greater net incremental increase in EC will result in lower mass emissions of salt and in conservation of water. Industrial dischargers are also allowed an exception if the increased EC is due to an unavoidable concentration of organic dissolved solids from the raw food product. In both these exceptions, beneficial uses must still be protected.

Oil field dischargers are generally required to meet a limit of 1,000 $\mu\text{mhos/cm}$ unless the discharger can successfully demonstrate to the Central Valley Water Board in a public hearing that the proposed discharge will not substantially affect water quality nor cause a violation of water quality standards.

The Central Valley Water Board has been requested by municipal dischargers to revise the EC effluent limit in order to take into consideration water conservation measures. Suggestions from commenter's were to develop an EC credit for calcium, potassium, and magnesium, allow the exception of increased EC due to unavoidable concentrations of organic dissolved solids from raw food products extend to dischargers other than food processors, and apply the 500 $\mu\text{mhos/cm}$ increase to receiving rather than source water.

Priority:

Medium

Current Action:

Public outreach to study the characteristics of the municipal wastewaters to determine typical mineral composition, sources of atypical salt concentrations, and alternative salinity control

measures. Evaluate the reuse of certain salts as agricultural amendment as a potential credit. In addition, study water conservation measures to determine the overall effect on electrical conductivity increase.

Current Resources: 1) Staff – 0.025 PY for FY 09/10, 0.025 PY for FY 10/11
2) Contract(s) -- \$0
3) Source(s) -- Central Valley Water Board and State Water Board

Additional Action: The funding for the primary action is just enough to do some public outreach without being able to actually study the characteristics of municipal wastewater. Additional resources are needed to conduct the evaluation.

Additional Resource Requirements: 1) Staff - 1.0 PY
2) Contract(s) - \$30,000
2) Source(s) – State Water Board

Issue 6: State Water Board Collaboration

Discussion: The State Water Board is developing policy and criteria on a statewide level for many programs. The Central Valley Water Board is collaborating in the development of many of these issues. An itemized list of the policies and criteria are as follows:

- 1) Anti-Degradation Policy
- 2) Aquifer Storage and Recovery Policy
- 3) Bio-indicator Development
- 4) Cadmium objective and implementation policy
- 5) Chlorine residual objectives and implementation policy
- 6) Mercury offset policy
- 7) Methylmercury objectives
- 8) Onsite wastewater treatment regulations/waiver
- 9) Toxicity control provisions for the SIP

Priority: Medium

Current Action: The Central Valley Water Board staff is actively engaged in roundtables, and participating and coordinating with the State Water Board on the policies and criteria enumerated above.

Current Resources:

- 1) Staff – 0.2 PY
- 2) Contract(s) - \$0
- 3) Source(s) - Basin Planning, NPDES and WDR programs.

Issue 7: Water Quality Objective for pentachlorophenol

Discussion: The U.S. Environmental Protection Agency recommends that the Regional Water Board address potential revisions to the pentachlorophenol water quality objectives.

Priority: Medium

Current Action: The Central Valley Water Board staff is actively engaged in roundtables and participating and coordinating with the State Water Board concerning water quality objectives.

Current Resources:

- 1) Staff – 0.05 PY
- 2) Contract(s) - \$0
- 4) Source(s) - Basin Planning, NPDES and WDR programs.

Additional Action: The issue of more restrictive California Toxics Rule criteria for pentachlorophenol should be addressed. A plan needs to be developed to implement the water quality objective where applicable to protect early life stages of salmonid fish under low dissolved oxygen and high temperatures. Additional resources are needed to conduct the evaluation.

**Regional Water Quality Control Board, Central Valley Region
2007 Triennial Review
Response to Comments
Water Quality Control Plan for the
Tulare Lake Basin**

The Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) has provided opportunities for the public to submit written comments on the 2007 Triennial Review.

Written comments received prior to the 13 September 2007 workshop were submitted by:

1. Mr. Gerald F. Helt, City Engineer, City of Taft (page 2)
2. Mr. W. E. Loudermilk, Regional Manager, California Department of Fish and Game (page 2)
3. Ms. Laurel Firestone, Community Water Center; Debbie Davis, Environmental Justice Coalition for Water; and Martha Guzman, California Rural Legal Assistance Foundation (page 3)
4. Ms. Karen Schwinn, Associate Director Water Division, U.S. Environmental Protection Agency (page 5)
5. Mr. Juan Arambula, Assemblymember, 31st District (page 5)
6. Mr. R.L. Schafer, Tule River Subwatershed Southern San Joaquin Valley Water Quality Coalition (page 5)

During the Workshop on 13 September 2007, verbal comments were received from:

7. Mr. Stephen Hogg, Central Valley Clean Water Association and City of Fresno (page 8)
8. Mr. Bill Thomas, Southern San Joaquin Valley Water Quality Coalition (page 8)
9. Mr. David Cone, Deputy General Manager, Kings River Conservation District (page 8)
10. Mr. Lloyd Fryer, Kern County Water Agency (page 9)
11. Mr. R. L. Schafer, Secretary of the Tule River Association and Tule River subwatershed of the Southern San Joaquin Water Quality Coalition (page 9)
12. Mr. Dave Noerr, Councilman City of Taft (page 9)
13. Mr. Bob Gorson, City Manager, City of Taft (page 9)
14. Ms. Susana DeAnda, Community Water Center (page 9)
15. Mr. Elliot Balch, on behalf of Assemblymember Juan Arambula (page 9)

During 303(d) comment period:

16. Mr. Parry Klassen, East San Joaquin Water Quality Coalition (page 10)
17. Mr. Jon Nelson, Hume Lake Christian Camps (page 10)
18. Ms. Terry Kaplan-Henry, Sequoia National Forest (page 10)

Public Comments

19. Ms. JoAnne Kipps, (page 11)

The Central Valley Water Board provided opportunities for the public to submit written comments on the draft work plan for the Triennial Review.

Written comments received on or prior to 2 February 2010 were submitted by:

20. Mr. William Aravanis and Tim Souther, AMEC Geomatrix, Inc. (page 11)
21. Mr. Walter Pagel, Manager, Southern California Edison (page 12)
22. Mr. R.L. Schafer, Southern San Joaquin Valley Water Quality Coalition (page 12)
23. Mr. Jon Nelson, Hume Lake Christian Camps (page 13)
24. Ms. Jayne Battey, Director, Pacific Gas and Electric Land & Environmental Management (page 13)
25. Ms. Britton Schwartz, Legal Consultant, Community Water Center (page 13)
26. Ms. Janet Hashimoto, Chief Standards and TMDL Office, U.S. Environmental Protection Agency (page 14)

Following are the responses to comments received regarding the Triennial Review of the Water Quality Control Plan for the Tulare Lake Basin.

Mr. Gerald F. Helt, City Engineer, City of Taft

1. *City of Taft would like Sandy Creek declassified as a water of the United States and de-designate warm freshwater habitat.*

US EPA conducted a study and determined that Sandy Creek is hydrologically isolated and not a water of the United States (letter of 10 April 2008). The Central Valley Water Board found in Order No. R5-2009-0054 that Sandy Creek was not a water of the United States, and issued the City of Taft non-NPDES waste discharge requirements. No Basin Plan amendment is necessary to implement this determination. Staff investigated the appropriateness of WARM beneficial use in coordination with Department of Fish and Game (DFG). Based on the field evaluation, DFG recommends that WARM, WILD, and RARE remain designated beneficial uses of Sandy Creek. Given DFG's findings, we do not intend to reconsider the WARM beneficial use.

Mr. W. E. Loudermilk, Regional Manager, California Department of Fish and Game

2. *The Basin Plan does not currently address wetland beneficial uses and the regulation of discharges to wetlands, either through surface or groundwaters.*

The State Water Board adopted Resolution No. 2008-0026 on 15 April 2008 to begin work on a statewide wetland and riparian area policy for future consideration. The Central Valley Water Board will be coordinating with the State Water Board to develop the statewide policy. Further information can be found at: http://www.waterboards.ca.gov/water_issues/programs/cwa401/wrapp.shtml

3. *The Basin Plan should be amended to list impaired water bodies which exceed water quality objectives based upon reliable data.*

The 303(d) request should be submitted to the Central Valley Water Board during the listing process. Staff evaluated data submitted during the last solicitation and the Central Valley Water Board approved the 2008 Integrated Report of Federal Clean Water Act section 305(b) and section 303(d) list of water quality limited segments in June 2009. Staff will be soliciting data for the 2010 list later this calendar year. When submitting data for 303(d) list addition, the data should include the type of information that would support listing as described in the Listing Policy:

http://www.waterboards.ca.gov/water_issues/programs/tmdl/303d_listing.shtml .

The process to identify impaired water bodies is on a separate timeline from the triennial review. Since any changes to the Basin Plan require a full basin plan amendment process, it is not efficient to use limited staff resources to add impaired water bodies to the Basin Plan. When the Central Valley Water Board addresses the impairment, the Central Valley Water Board may consider amending the basin plan to include an implementation program to attain the water quality standards.

4. *Surface water beneficial uses should NOT be amended to remove assigned beneficial uses and the Kings, Kaweah, Tulare Lake, Tule and Westside groundwater hydrologic units should be amended to add the beneficial use of WILD and RARE.*

Designation and de-designation of beneficial uses are done in accordance with State and Federal laws and regulations that require a structured analysis that includes the scientific data supporting the proposed action. The Central Valley Water Board will designate and de-designate beneficial uses in accordance with the applicable State and Federal laws and regulations. Central Valley Water Board staff is interested in the interactions between groundwater and wildlife/rare species. DFG should provide specific information on the beneficial uses that DFG would like the Central Valley Water Board to consider, and what are the appropriate water quality objectives and implementation program that would protect those beneficial uses. The State Water Board wetlands policy is looking at new and/or revised beneficial use definitions. See response to Comment No. 2 for additional information is on wetlands.

5. *The Basin Plan should recognize the dynamics of water imports and exports and capitalize across water years to protect beneficial uses.*

The Central Valley Water Board will consider information on water imports and exports and the potential to support beneficial uses with stored water. Salt import should be reduced by assuring that imported water is of the highest quality possible. Staff are working with Department of Water Resources on the update

to the California Water Plan to identify sufficient water supplies to protect beneficial uses.

6. *The Basin Plan should incorporate an element which encourages the integration of water supply development and reliability, flood control and wetland restoration with strategies to sustain designated beneficial uses.*

The Central Valley Water Board wants to protect the beneficial uses of the waters in its jurisdiction and is interested in more information on what kind of element DFG had in mind.

Ms. Laurel Firestone et al

7. *The Basin Plan must incorporate drinking water source protection, particularly groundwater, as a top priority and develop a clear, concrete timetable and action plan for implementation.*

The municipal and domestic supply beneficial use (MUN) is defined as uses of water for community, military, or individual water supply systems, including, but not limited to, drinking water supply. Most groundwater within the Tulare Lake Basin is designated MUN. At a minimum, water designated MUN shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels (MCLs) specified in the provisions of Title 22 of the California Code of Regulations. There are several groundwater protection policies and programs. For example dairies are regulated by a general order that will address nitrates and salts in groundwater and irrigated lands are regulated by the Irrigated Lands Conditional Waivers. Also, the Central Valley Water Board recently adopted Resolution No. R5-2008-0181, which places a priority in developing a groundwater strategy for the Central Valley Region. The Groundwater Strategy will assure comprehensive, consistent, and coordinated protection of the beneficial uses of groundwater throughout the region to ensure a sustainable, high quality water supply for the Central Valley. The Triennial Review Work Plan includes a high priority issue to assess groundwater and develop control policies. See Work Plan Issue No. 1 for more information.

8. *Nitrate contamination of drinking water sources continues to occur in every county in the Tulare Lake Basin, meaning that municipal and domestic beneficial uses are not being protected and must be restored. Given the widespread impact to beneficial uses in the region, particularly human health, a strong program for implementation should be given top priority.*

See response to Comment No. 7 and Work Plan Issue No. 4.

9. *The Regional Board should require all dischargers of groundwater contaminants to provide monitoring data, at least up and down gradient of their facility, as part of the permit requirements.*

In general, waste discharge requirements for discharges of waste that could cause long-term loss of a designated beneficial use or that could impair the designated beneficial use require groundwater monitoring. For example, wastewater treatment facilities (Dinuba, Exeter, Farmersville, Porterville, and Tulare), wineries, and some dairies. Attachment A of General Order No. R5-2007-0035, the general order for existing milk cow dairies, requires upgradient and downgradient monitoring wells. Groundwater monitoring programs at many facilities require upgradient and downgradient monitoring when ordered by the Executive Officer. The Central Valley Water Board does require groundwater monitoring as part of the permitting process.

10. *Salinity objectives should include nitrates specifically and clarify the sources of nitrates, how objectives will be implemented in best management practices and treatment technology requirements, as well as the means of measuring compliance.*

The Central Valley Water Board is concerned with nitrates, which are part of salts within the Tulare Lake Basin. For waters designated as MUN, both nitrate and salts have maximum contaminant levels which already serve as water quality objectives. However, Water Code section 13360 prohibits the Central Valley Water Board from specifying the manner of compliance. The Central Valley Water Board is exploring sources and best management practices in cooperation with Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS). CV-SALTS is a collaborative basin planning effort aimed at developing and implementing a comprehensive salinity and nitrate management program. Groundwater and salinity are top priorities identified consistently in triennial reviews. See Work Plan Issues No. 3 and 4 for more information.

11. *It is vital that municipal use designations not be eliminated in areas where drinking water wells are located merely because point or nonpoint contamination sources have been allowed to pollute the aquifer to the point that it is no longer useable. The Regional Board has a responsibility to protect and restore our water for beneficial uses.*

Designation and de-designation of beneficial uses of groundwater are done in accordance with State laws and regulations that require a structured analysis that includes the scientific data supporting the proposed action. The Central Valley Water Board will designate and de-designate beneficial uses of groundwater in accordance with the applicable State laws and regulations. In accordance with the California Water Code, the Central Valley Water Board protects the beneficial uses of the waters in its jurisdiction. The Central Valley Water Board's strategy for managing contaminated sites is guided by the Water Code, Chapter 15, Title 27, and State Water Board Resolution No. 92-49. Groundwater cleanup is described in the Tulare Lake Basin Plan started at page iv-23.

Ms. Karen Schwinn, Associate Director Water Division, U.S. EPA

12. *Other parties have emphasized the importance of improving monitoring and management of groundwater in this region – especially considering extensive reliance on groundwater for drinking water supplies. We agree that steps to better manage this resource are essential.*

In addition, we recommend that a great emphasis be placed on work to support the protection and restoration of wetlands and aquatic resources.

The Central Valley Water Board appreciates the comment and the support of monitoring and groundwater management. The Water Boards also agree that protection and restoration of wetlands and aquatic resources is important. See response to Comment No. 2 for more information.

Juan Arambula, Assemblymember, 31st District

13. *Addressing salinity issues is critical for the viability of our agricultural economy.*

The Central Valley Water Board thanks Assemblymember Arambula for his support in identifying a critical issue. Salinity is an issue identified in our work plan with a high priority. The Central Valley Water Board is exploring sources and best management practices in cooperation with CV-SALTS. CV-SALTS is a collaborative basin planning effort aimed at developing and implementing a comprehensive salinity and nitrate management program. See Work Plan Issue No. 3 for more information.

R.L. Schafer, Tule River Subwatershed Southern San Joaquin Valley Water Quality Coalition

14. *The paramount water quality problem in the Basin is the accumulation of salts.*

The Central Valley Water Board agrees that salt is a high priority. See response to Comment No. 13.

15. *The definitions of the beneficial uses need to be reviewed in detail and in some cases clarified.*

Beneficial use definitions are consistent statewide; however, the Central Valley Water Board can make minor modifications as appropriate. Please specify the change in definition you are contemplating, and which water bodies would be affected.

16. *The designations in Table II-1, Tulare Lake Basin, Surface Water Beneficial Uses and Table II-2, Tulare Lake Basin Groundwater Beneficial Uses, need to be reevaluated for past, present and probable future beneficial uses, particularly with respect to the reasonableness for water quality requirements for intermittent*

streams, stream channels that are dry most of the year, for MUN, WARM, COLD, WILD, RARE, and SPWN.

Designation and de-designation of beneficial uses are in accordance with State and Federal laws and regulations. The Central Valley Water Board has explored the possibility of accounting for the climate and hydrology of waterbodies in determining beneficial use designations. Also, please see response to Comment No. 4.

17. *Generally, the water quality objectives of the Tulare Lake Basin Plan, both inland surface waters and groundwater are well constituted; however, additional numerical limitations would be helpful for implementation.*

The Central Valley Water Board is interested in maintaining a clear Basin Plan that protects the beneficial uses of the waters in its jurisdiction. Please submit specific information on what revisions to the Basin Plan concerning numeric objectives are necessary and please submit any information that supports your proposed revisions.

18. *Nearly all of the Implementation Plan standards, regulations, prohibitions, policies, principles, goals, objectives and recommendations have been utilized and from personal experience effectively implemented. The basin plan serves as the reference document, the guide, for project development and preservation of water quality of the Tulare Lake Basin.*

The Central Valley Water Board staff appreciates your comments. The basin plans contain California's administrative policies and procedures for protecting state waters and have the full force and effect of law, so it is important for them to be effective.

19. *The Fresno Office staff of the RWQCB has provided thorough and detailed assistance for the effective implementation of the Basin Plan water quality objectives and standards. We, that represent the public districts, stakeholders and landowners greatly appreciate and acknowledge the professional relationship that prevails with the staff.*

The Central Valley Water Board staff appreciates your comments.

20. *It is important that all such prohibitions, policies, controls and plans are updated but remain consistent and provide stability for the reissuance of WDRs and waivers, and for the continuation of general orders.*

Please provide specifics of anything that needs updating, in what way it should be updated, and the supporting data for any proposed amendment to the Basin Plan.

21. *Dairies are a major agricultural industry in Tulare County, more than 300 dairy operations, and the recent General Order has established additional and*

comprehensive requirements, some of which will result in extensive costs for implementation and other provisions will result in a detailed record of actions already being conducted by the dairymen. After the existing conditions report due 31 December 2007 and other reports due 01 July 2008 have been developed, transmitted and reviewed, and the problems with the general order identified, we encourage the RWQCB conduct a further hearing for amendment of the identified problems with the General Order.

The triennial review is primarily for receiving comments on planning issues. Specific orders adopted by the Central Valley Water Board have comment periods before orders are adopted. Please coordinate with staff in the Dairy program for revision or update of the General Order.

22. *The irrigated lands agricultural discharge waiver program (ILP) is another example of the implementation of a plan for water quality control of nonpoint source discharges. However, the ILP needs continuity and stability with a requirement that after the characterization of the water quality of the basin or subbasin has been achieved and the identification of water quality issues resolved, the level of surveillance, monitoring, and reporting needs to be curtailed to a reasonable frequency.*

The triennial review is primarily for receiving comments on planning issues. Specific waivers and other orders adopted by the Central Valley Water Board have comment periods before waivers are issued. Please coordinate with staff in the Irrigated Lands program for revision or update of issues.

23. *The Tulare Lake Basin is a closed and isolated basin and surface water quality must be treated differently from the remainder of the Central Valley. Either a separate irrigated lands agricultural discharge waiver program or a General Order needs to be formulated for the unique conditions of the Tulare Lake Basin.*

See response to Comment No. 22.

24. *The Basin Plan also identifies objectives of a surveillance and monitoring program which are comprehensive and need to be reviewed, clarified and implemented.*

The State Water Board has Groundwater Ambient Monitoring Assessment (GAMA) and Surface Water Ambient Monitoring Program (SWAMP) programs which are conducted on a regular basis and provide information regarding the status of groundwater and surface water. See Work Plan Issue No. 4 for more information.

25. *We concur that the current monitoring and surveillance program within the Tulare Lake Basin is irregular and detailed information may not be available for areas of the Basin, and we support a more comprehensive and organized program*

See response to Comment No. 24 and Work Plan Issue No. 4. The Central Valley Water Board is developing a groundwater strategy, establishing a Groundwater Monitoring Advisory Workgroup, and welcomes your support in developing a more comprehensive and organized program.

Oral comments submitted on 13 September 2007

26. Steven Hogg, City of Fresno

Two high priority issues 1) Groundwater quality objectives for salinity and 2) the beneficial use designations. Electrical Conductivity standard of 500 μ mhos/cm + source may not be attainable. Groundwater quality objectives for salinity need to be revisited. Tributary rule and sources of drinking water policy create costly requirements for communities. Central Valley Clean Water Association (CVCWA) . Karl Longley will be speaking to executive committee to develop funding.

A region-wide strategy on salinity is being formulated by the Central Valley Water Board. See Work Plan Issue No. 3 for more information, in regards to salinity. See Comment No. 7, in regards to groundwater.

27. Bill Thomas, Southern San Joaquin Valley Water Quality Coalition

Basin Plan is a fairly good basis to start. The Tulare Lake is a closed basin with no outlet. Concur with the points by staff. Need to do a critical review of the designation of the beneficial uses, particularly MUN, REC-1, cold and warm. Move from narrative objectives to numerical objectives.

Please see response to Comments Nos. 4 and 17.

28. David Cone, Deputy General Manager KRCD

Salinity in lower Kings River has basically been improving, its not that there isn't a problem, it's not as bad as I myself had foreseen

Central Valley Water Board staff look forward to continuing to work with you in monitoring the salinity in the Kings River. The priority of salinity in the lower Kings River will be changed from High priority to Medium Priority based upon continued monitoring efforts documenting salinity improvements.

29. Lloyd Fryer, Kern County Water Agency

Out of valley solution to reduce salinity and keep beneficial uses.

Salinity is a critical issue which we are evaluating. See Work Plan Issue No. 3 for more information. In addition, the Basin Plan currently includes a recommendation for a valleywide drain to remove salt-laden wastewater from the Basin.

30. R.L. Shafer, Watermaster Tule Lake Association, Tule River Subwatershed

In 1975, when the Basin Plan was adopted, there were numerous comments. In the Tulare Lake Basin the most important industry is agriculture. Need to reevaluate beneficial uses on streams which are dry.

Please see response to Comments Nos. 1 and 4.

31. Dave Noerr, councilman of the City of Taft and Bob Gorson, City manager of the City of Taft

The WARM beneficial uses should be de-designated from Sandy Creek. After a 25-yr rainfall event, the Creek was dry after 4 hours.

Please see response to Comment No.1.

32. Community Water Center

We want clear objectives and a clear implementation plan with clear benchmarks.

The Central Valley Water Board is interested in maintaining a clear Basin Plan that protects the beneficial uses of the waters in its jurisdiction. Please submit specific information on what revisions to the Basin Plan are necessary and please submit any information that supports your proposed revisions.

33. Elliot Balch on behalf of Senator Juan Arambula – The Senator is very concerned about groundwater quality and stands ready to assist the Board in any way to increase funds and staff. He wishes the Board could play greater role with communities with impacted groundwater and alternative sources of surface water.

Please see response to Comment No. 7. Many programs would benefit from additional resources, including planning, the Dairy Program, the Irrigated Lands Regulatory Program, and CV-SALTS.

Comments from 303(d) submitted by 16 March 2009

34. Mr. Parry Klassen, East San Joaquin Water Quality Coalition

The ESJWQC is aware of similar situations where beneficial uses have been contested by entities within the Tulare Basin Plan area during the associated Basin Plan amendment process. The entities that supplied documentation regarding inappropriate beneficial use designations were told that there are insufficient funds to review those documents. The ESJWQC would like to take

this opportunity to remind the State and Regional Boards of the importance of reviewing and updating beneficial uses.

The list of triennial review issues far exceeds the staff resources allocated to planning activities. Existing resources only allow a small portion of the highest priority issues to be addressed. Addressing inappropriate beneficial use designations is a high priority issue. See Work Plan Issue No. 1 for more information on this issue.

35. Mr. Jon Nelson, Hume Lake Christian Camps

The 'Beneficial Use' determination of a cold water fishery does not fit the intent of this body of water. I know trying to change the beneficial use of Hume Lake exceeds the scope of this determining board. But to acknowledge the questionability of the current 'Beneficial Use' determination further underlines the insufficient evidence to support a determination for the Hume Lake 303(d) listing.

The Central Valley Water Board appreciates the submittal of this information and has included Hume Lake in the Triennial Review Work Plan. Please see Work Plan Issue No. 1 for more information.

36. Ms. Terry Kaplan-Henry, Sequoia National Forest

Beneficial uses of Water are not properly matched to habitat conditions relative to Cold/Warm water habitat designations. 1) if a designation of warm fresh water were recognized for Lake Isabella, a beneficial use much more appropriate for existing habitat conditions...2) If a designation of warm fresh water were recognized for Hume Lake, a beneficial use much more appropriate for existing habitat conditions

The Central Valley Water Board appreciates the submittal of this information and has included Lake Isabella and Hume Lake in the Triennial Review Work Plan. Please see Work Plan Issue No. 1 for more information.

37. Ms. JoAnne Kipps, Private Citizen

Recommend that the Basin Plan be amended to delete Guidelines for the Land Disposal of Stillage Waste from Wineries. Encourage the development of a general order for existing land discharges of stillage and non-stillage winery waste

The Central Valley Water Board is concerned over groundwater quality and has included the issue of reviewing and revising, as necessary, the winery waste guidelines in Work Plan Issue No. 4, the groundwater assessment and control programs.

38. Mr. William Aravanis and Tim Souther, AMEC Geomatrix, Inc. on behalf of Berry Petroleum Company

....Berry requests that the Central Valley Water Board review COLD for HA 558.90 and for downstream stretches of Poso Creek in the Valley Floor Waters (North Kern HA 558.80) and consider dedesignation of COLD beneficial uses in those hydrologic areas.

The work plan will be amended to add Poso Creek to be included in Work Plan Issue No. 1.

39. Mr. Walter Pagel, Southern California Edison

The current combined WARM and COLD classifications for Lake Isabella and the sections of the Kern River described above (as opposed to any alternative suggestion for an exclusively COLD classification) are appropriate and consistent with (i) the physical conditions and fish communities in those sections, (ii) a considerable amount of sampled and modeled temperature data in those sections, and (iii) the stated management objectives of the resource agencies with jurisdiction over those sections.

The Central Valley Water Board looks forward to working with you and sharing data collected on the Kern River and Lake Isabella.

40. Mr. R.L. Schafer, Southern San Joaquin Valley Water Quality Coalition

The Coalition supports consideration of the dedesignation of MUN, IND, PRO, REC1, WARM and COLD for surface waters of reaches of Valley floor streams that are intermittent and typically dry or above a certain elevation. The Coalition is willing to work with the Regional Board staff in the development of use attainability analyses for such dedesignations.

The Central Valley Water Board is interested in correctly designating beneficial uses to protect the Region's waters and will investigate these matters as described in the Work Plan.

41. *The Coalition also requests the opportunity of involvement in the development of a statewide wetland and riparian area policy as envisioned under SWRCB Resolution No. 2008-0026.*

For more information on wetland policy, contact the State Water Board's, Division of Water Quality/Regulatory Unit, at (916) 341-5506 or at:
http://www.waterboards.ca.gov/water_issues/programs/cwa401/wrapp.shtml

42. *The Coalition will work with the Regional Board staff in coupling data bases for determination of salt and nitrate levels in the surface and groundwater of the Tulare Lake Basin.*

The Regional Water Board staff welcomes your cooperation.

43. *The Coalition would like to have the opportunity of being active in the Groundwater Monitoring Advisory Workgroup.*

For more information on the Groundwater Monitoring Advisory Workgroup, contact Clay Rodgers at (559) 445-5116 or at crodgers@waterboards.ca.gov.

44. *The Coalition would like to be included in the development of such policies, particularly with respect to the anti-degradation policy, the aquifer storage and recovery policy and the onsite water treatment regulations/waiver.*

Email subscriptions to these programs can be made at:

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

45. Mr. Jon Nelson, Hume Lake Christian Camps

Hume Lake Christian Camps would like the Regional Water Board to remove COLD from Hume Lake's beneficial use.

Hume Lake is listed in the work plan as an area of study for use attainability analyses. Regional Water Board staff looks forward to working with Hume Lake Christian Camps.

46. Ms. Jayne Battey, Director, PG&E Land & Environmental Management

PG&E would like clarification regarding the work plan pertaining to reviewing COLD beneficial use designations for the Kern River.

There are four segments listed in the Basin Plan in regards to the Kern River: Above Lake Isabella; Lake Isabella; Lake Isabella to KR-1; Below KR-1. The work plan will reflect which segment is under consideration for dedesignation (Lake Isabella). The Regional Water Board staff welcomes the assistance of PG&E in the review of beneficial uses.

47. Ms. Britton Schwartz, Legal Consultant, Community Water Center

Community Water Center recommends that the priority issues in the work plan be reordered to reflect the importance and urgency of addressing the groundwater quality problems facing the Tulare Lake Basin.

The issues pointed out by the Community Water Center Work Plan Issues Nos. 1, 3, and 4, are all ranked at a high priority.

48. *Community Water Center strongly support the work plan's prioritization of the issues of groundwater quality and nitrate contamination, we urge the Regional*

Water Board to ensure adequate resources and funding are allocated without delay towards a concrete plan of implementation to address these issues.

Several programs as outlined in the work plan are looking at groundwater. GAMA, Groundwater Monitoring Advisory Group, Dairy Program, Title 27, and many other programs have groundwater monitoring as a strong component.

49. Ms. Janet Hashimoto, Chief Standards and TMDL Office, U.S. Environmental Protection Agency

EPA recommends that the Regional Water Board address potential revisions to the pentachlorophenol water quality objectives as part of this Triennial Review process.

The Regional Water Board will add the issue of the more restrictive California Toxics Rule criteria for pentachlorophenol and create a plan to implement the objective where applicable to protect early life stages of salmonid fish under low dissolved oxygen and high temperatures.