

Regional Water Quality Control Board, Central Valley Region
2005 Triennial Review
Response to Comments
Water Quality Control Plan for the
Sacramento River and San Joaquin River Basins

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 2005 Triennial Review. This document contains written responses to comments received as of 25 January 2006.

Written Comments received prior to the 18 March 2005 workshop from:

1. Mr. Wendell Kido, District Manager, Sacramento Regional County Sanitation District (1-7)
2. Mr. Anthony L. Francois, Esq., Director, Water Resources, California Farm Bureau Federation (8-9)
3. Mr. Warren Tellefson, Executive Officer, Central Valley Clean Water Association (10-21)
4. Mr. Steve Beckley, CEO/President, Western Plan Health Association (22-23)
5. Mr. Michael E. Aceituno, Supervisor, Sacramento Area Office, National Marine Fisheries Service (24-25)
6. Ms. Kathleen Martyn Goforth, Water Quality Standards Coordinator, US Environmental Protection Agency (26-33)
7. Mr. John Hewitt, Esq., California Farm Bureau Federation (34-35)
8. Mr. William Busath, City of Sacramento (36-41)
9. Mr. Steven Shaffer, Director, Department of Food and Agriculture (42-43)
10. Mr. Norman S. Johnson, Vice President, Mining Remedial Recovery Company (44)

During the Workshop on 18 March 2005, verbal comments were received from:

11. Mr. Warren Tellefson, Central Valley Clean Water Association (45-48)
12. Ms. Jane Vorpapel, CA Department of Fish and Game, Region 1 (49-50)
13. Mr. Mark O'Brien, Port of Stockton (51-53)
14. Mr. Anthony L. Francois, California Farm Bureau Federation (54)
15. Mr. Robert Roscoe, Sacramento Suburban Water District (55)
16. Mr. John Headlee, US Army Corps of Engineers (56)
17. Mr. Ed Yates, California League of Food Processors (57-59)

After the 18 March 2005 workshop, written comments were received from:

18. Mr. Robert Roscoe, Sacramento Suburban Water District (60)
19. Dr. G. Fred Lee (61)
20. Mr. Donald B. Koch, Department of Fish and Game, Northern California-North Coast Region (62-63)

Following are the responses to comments received regarding the Triennial Review of the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins.

Wendell Kido, District Manager, Sacramento Regional County Sanitation District (SRCSD)

1. *Drinking Water Policy – SRCSD supports the continuation of the Central Valley’s process for the development of a drinking water policy and associated Basin Plan amendments.*

Comment noted.

2. *SRCSD supports adoption of bacteria objectives that are based on appropriate indicators. The currently existing total coliform effluent limits in NPDES permits are not based on water quality objectives contained in the Basin Plan. Also, total coliform bacteria concentrations are not the best available indicators to determine the presence of pathogens in receiving waters.*

The State Water Board is developing statewide criteria for bacteria to protect waters designated for contact recreation. Generally, statewide plans and policies supercede Regional Water Board plans and policies. Therefore, Central Valley Water Board staff will work with State Water Board staff to develop the criteria. See Issue No. 12 for more details on this issue.

The Water Board is required by the Porter Cologne Water Quality Control Act and the Clean Water Act to protect the beneficial uses of waters of the state. To assure protection of beneficial uses, the Water Board considers information and requirements of other agencies. With respect to effluent limits for bacteria that are used in regulating discharges of wastewater, the Water Board consults with and considers information provided by the Department of Health Services to assure protection of public health. Total coliform bacteria are not used as an indicator to determine the presence of pathogens in receiving waters.

3. *The Regional Board must adopt a plan for the implementation of bacteria objectives that properly guides staff on the linkage between adopted water quality objectives and water quality based effluent limitations.*

See response to Comment #2.

4. *SRCSD supports the re-evaluation of the diazinon objectives that were recently adopted in to the Basin Plan. New information has been discovered that questions the validity of the Fish and Game criteria for which the Basin Plan objective are based.*

After reviewing the new information, the Executive Officer committed to conducting a review and proposing any necessary changes to the diazinon water

quality objectives no later than 30 June 2007. This is consistent with the time frame adopted by the Central Valley Water Board for reviewing the implementation provisions. The Executive Officer has also acknowledged that new supplemental diazinon labels require actions that should result in reductions necessary to attain the recently adopted diazinon water quality objectives. See Issue No. 6 for more details on the status of this issue.

5. *SRCSD encourages the Regional Board to adopt water quality objectives for ammonia and chlorine according to the requirements of Porter-Cologne. ... The implementation program for adopted objectives must clearly direct permit staff of the need to directly link water quality based effluent limitations with such objectives.*

The State Water Board has begun the process of adopting statewide standards for total residual chlorine and chlorine producing oxidants. Central Valley Water Board staff will work with the State Water Board staff on this process.

Water quality objectives for ammonia are not in process. Since the narrative toxicity objective indicates that the Central Valley Water Board can use available information to assist in determining compliance with the objective, current EPA guidance is already considered in specifying effluent and receiving water limits for ammonia. Where appropriate, the Central Valley Water Board considers the factors in Water Code Section 13241.

See Issue Nos. 13 and 17 for more details on the status of these issues.

6. *SRCSD recommends the removal of the incorporation by reference for secondary maximum contaminant levels. Secondary MCLs are recommendations based on consumer acceptance levels and are therefore unrelated to human health and welfare or the protection of aquatic life. Also, as applied to drinking water for which they are adopted, secondary MCLs are applied at the tap, not to the drinking water source (or in this case receiving water). At the very least, secondary MCLs must be applied to receiving water quality as a dissolved standard instead of a total standard.*

The Central Valley Water Board is responsible for protecting all the beneficial uses of water, including municipal and domestic water supply and aesthetic enjoyment. Use of secondary MCLs is appropriate to protect these uses from impairment. Because they are designed to prevent adverse tastes and odors, laundry staining, and other aesthetic impacts, secondary MCLs directly protect human welfare as it may be affected by chemical constituents and other water quality conditions. While many municipal water systems provide filtration and/or other treatment prior to delivering water to their customers, small domestic water supply systems are not required to do so and are largely unregulated. As such, small domestic water supply system users are not protected from the human welfare and aesthetic impacts that secondary MCLs are designed to prevent. The

Water Boards have the responsibility to protect beneficial uses of water from discharges of waste. To assume that water supply systems will provide treatment to meet secondary MCLs would unfairly transfer the cost of compliance from the discharger of waste to the water user.

Because no treatment is required for small domestic water supply systems, it is unreasonable to assume that ambient water will be filtered prior to delivery to customers. For this reason, compliance with drinking water-related water quality objectives and criteria is determined using total recoverable analysis of unfiltered water samples, not as dissolved. This is consistent with the manner in which the USEPA determines compliance with its promulgated and recommended human health and welfare protective criteria. According to Phil Woods, former Water Quality Standards Coordinator for USEPA-Region 9, "All of EPA's water quality criteria were originally established as total recoverable. ... Divergence from the general practice began when the metals criteria to protect aquatic life uses were converted to dissolved. Metals criteria to protect human health as well as criteria guidance for organics/pesticides have not been converted." (personal communication, 17 July 2001)

7. *SRCSD recommends that that Regional Board develop and adopt a much needed policy for the interpretation of the narrative toxicity objective and its application to whole effluent toxicity (WET) effluent limits. ... WET effluent limits ... must better reflect the conditions that actually occur in receiving waters (i.e. duration and magnitude of exposure of organisms in tests versus in the receiving water).*

State Water Board staff is working on revisions to the Statewide Implementation Policy to provide further guidance on implementing the toxicity provisions in the CTR. Central Valley Water Board staff is working with the State Water Board staff on this process.

Anthony L. Francois, Esq., Director, Water Resources, California Farm Bureau Federation

8. *The two most critical issues for the Board to address in the next Basin Plan review include development of sound policy for Effluent Dominated Water Bodies, and development of sound policy to address the application of the Tributary Rule to Agricultural Dominated Water Bodies and Agricultural Conveyance Facilities. Concerns detailed in letters from the California Farm Bureau, California Plant Health Association, and the California Department of Food and Agriculture, dated 23 May 2003 and 7 July 2003, regarding the Irrigated Lands Program.*

The letters request a policy for water bodies dominated by agricultural flows that recognizes that California's natural hydrology has been greatly altered through flood control and water supply projects. The state's economy and culture has developed as a result of these modifications. It is not reasonable to expect that the natural hydrology and native ecology can be restored. Flow in these channels

provides for incidental beneficial uses such as aquatic habitat that would not otherwise exist or would be diminished except for the flows that agriculture production provides. Channels that have been straightened and deepened and which were build to convey drainage cannot support full aquatic life uses, drinking water, or contact recreation. In regulating water quality in the altered hydrologic conveyance, the aquatic life value and other incidental beneficial uses that agricultural production provides should not take priority over the function for which these channels now serve and have served for decades. Note that in 1995, the State Board convened advisory task forces on various issues related to the development of the Inland Surface Waters Plan. One such task force looked at the implementation of water quality standards in agricultural waters and developed recommendations that make up a framework for a policy. The framework includes categorization of water bodies depending on the nature of the water body from natural water body to constructed agricultural drain. Beneficial uses and water quality objectives are then assigned according to the category of the water body recognizing the limitations and placing a priority on the function of the water body over the incidental uses.

The letters also note that natural water bodies downstream of the agricultural conveyance system, which are the receiving waters for agricultural discharges, have been impacted by the modification of the natural hydrology. Flows have been reduced and in some cases eliminated most of the time. This has impacted the assimilative capacity of these water bodies. This water is of poor quality, primarily with respect to trace elements and salinity and at times does not meet water quality objectives. This is the nature of the complex modified and managed hydrology. The Regional Board should use the tools provided in the Water Quality Standards (40 CFR 131.10) regulations for the Federal Clean Water Act to designate appropriate uses. These regulations provide a process for designating subcategories of uses, seasonal uses and removing designated uses that are not existing uses.

Development of a policy to provide appropriate protection of beneficial uses within effluent dominated and agriculturally dominated water bodies is a high priority for this triennial review period. The submitted information will be carefully evaluated in the formulation of any policies. See Issue Nos. 2 and 3 for more details regarding these issues.

9. *Submitted “A Review of the Administrative Record for the Central Valley’s Water Quality Control Plan: 1975 – 1994” prepared for the California Resource Management Institute in September 2003.*

The report comes to several broad conclusions about inadequacies in the Basin Planning process, including the following:

- *The Central Valley Water Board process for adopting water quality standards in 1975 failed to include a number of considerations and an appropriate program of implementation as required by state law.*
- *Many of the standards adopted in 1975 have not been reviewed to determine if they are still appropriate and applicable.*
- *Regulatory decisions are now being made that implement standards that were adopted thirty years ago.*

Following is a brief response to each of the above points.

1975 Adoption Process did not address all the required factors in state law.

The review assumed that the entire record was available for review. On the contrary, the preparation and retention of administrative records was not required until 1990 so the basin plan records prior to that date are incomplete. However, the available information suggests that all the Water Code factors were considered. Because, the existing record is incomplete, it is inappropriate to second-guess the pre-1990 decision processes and the considerations that went into the adoptions. The California Water Code does not provide much detail on the depth of analysis that is needed for any of the factors. For example, the Water Code requires the Central Valley Water Board to establish water quality objectives that ensure reasonable protection of beneficial uses and that in doing this must consider economic considerations (among others). The existing record does include economic considerations as well as the other factors required by the Water Code. The authors of the report conclude that the level of consideration was not adequate. Staff does not agree with this conclusion.

Many of the standards adopted in 1975 have not been reviewed to determine if they are still appropriate and applicable.

The Central Valley Water Board has conducted periodic reviews of water quality standards (as required by State and Federal law). In each review, the Central Valley Water Board receives input from interested parties and stakeholders and develops a priority list of basin planning activities. The Central Valley Water Board works on the issues as resources allow. In the past, basin plan amendments have included addition of policies for applying water quality objectives; policies for controlling groundwater contamination; water quality objectives for copper, zinc and cadmium in the Sacramento River Watershed; selenium objectives and implementation programs in the San Joaquin River Watershed; site specific amendments dealing with discharges to Deer Creek; averaging periods for temperature, turbidity and pH, compliance schedules, and many other items. During each review the Central Valley Water Board solicits input on the adequacy of existing beneficial uses and water quality objectives, reviews the information submitted and the Central Valley Water Board makes a specific finding regarding

the adequacy of existing uses and objectives. While there have been complaints about the water quality objectives, compelling information has not been presented to demonstrate what is wrong with existing objectives and what objectives would be more appropriate. Over the years, virtually all of them have been found to be appropriate. When they were not, steps were taken to correct them.

The report discusses the inadequacy of existing beneficial use designations, particularly as they are assigned by the so-called tributary rule. The Basin Plan specifically identifies beneficial uses that apply to the major streams, rivers and lakes in the Region. The basin plan has always contained language that indicates that the beneficial uses of any specifically identified water body generally applies to its tributary streams. The basin plan indicates that in some cases this general assumption may not be appropriate and in these cases special studies are needed to determine what beneficial uses are appropriate and to designate them through the basin planning process. This policy has been used for the past 30 years and has only recently been the subject of criticism. Dischargers to effluent and agricultural dominated water bodies have found that the effluent limits based on the designated beneficial uses have been difficult and expensive to comply with and have requested the Central Valley Water Board modify the beneficial uses to provide regulatory relief.

The Central Valley Water Board has agreed through the triennial review process that review of the basin plan standards and provisions regarding effluent and agricultural dominated water bodies are a high priority. However, an important point is that the Basin Plan has always recognized the problem with discharges to these water bodies and the implementation plan has always clearly stated that discharge of wastes is inappropriate as a permanent disposal method in sloughs and streams with intermittent flow or limited dilution capacity.

Because of limited resources, the Central Valley Water Board identifies in the triennial review workplan the various studies needed to protect the waters within its jurisdiction and gives a high priority to the determination of appropriate uses when a regulatory action is needed. This approach makes sense, since there are not enough resources to conduct beneficial use studies on all the unnamed water bodies. Specific dischargers can work with the Central Valley Water Board to conduct the studies needed to make beneficial use determinations. This burden is a reasonable cost since the Basin Plan has always indicated that discharges to such water bodies should not be a permanent disposal option and the dischargers should expect to carry the burden for conducting the special studies that are needed to support the Central Valley Water Board taking an action that is an exception to the Basin Plan. See Issue No. 1 for additional details on this issue.

Regulatory decisions are now being made that implement standards that were adopted thirty years ago. In their opinion, this is inappropriate because the standards were adopted in violation of the applicable laws at the time and

presumably the authors believe that the standards adopted in 1975 are too stringent.

The Central Valley Water Board does not agree that the 1975 Basin Plan was adopted in violation of the Porter-Cologne Act. The Central Valley Water Board, as evidenced in each triennial review, also finds that, in general, the standards are appropriate for the thousands of miles of streams in the Central Valley. Many numerical water quality objectives that apply in the Central Valley have been promulgated by US EPA and would require a basin plan amendment process on the State's part as well as action by US EPA to change them. Nevertheless, the authors of the report take issue with a few objectives that are included in the Basin Plan, most notably the narrative toxicity objective. The Basin Plan contains a narrative toxicity objective that is meant to provide protection in cases where there are no numerical objectives or where other factors, such as additivity or synergism, may play a role. This flexibility is necessary to allow the Central Valley Water Board to use the most current science to protect the beneficial uses of its waters. The report is critical of this narrative objective and its application. As the narrative states, the Central Valley Water Board, in determining compliance with the narrative objective, can refer to available information provided by dischargers, US EPA, Fish and Game and others. The Central Valley Water Board has often used information that dischargers oppose. Dischargers have contended that the Central Valley Water Board must adopt the various criteria that it can implement and enforce them.

This has been the topic of debate in and out of the courts. It continues to be the Water Board's position that the narrative objective was adopted in the proper manner and is being implemented in a reasonable and legal manner.

Warren Tellefson, Executive Officer, Central Valley Clean Water Association

10. *The issues that relate to effluent dominated waterbodies, drinking water policy and TMDLs are being addressed through processes or programs separate from the Triennial Review so they should be kept in a list separate from the Triennial Review workplan. That way the triennial review list can remain true to its original intent, which is to evaluate existing water quality standards and identify new issues of concern.*

While other programs and entities are providing the majority of the resources on these issues, basin planning staff resources are still needed to provide assistance. Therefore, to track the Region's basin planning resources, these issues should remain on the triennial review list.

11. *CVCWA believes that proper development of bacterial objectives is an important basin planning need. The Regional Board should adopt bacteria objectives that are consistent with the needed level of protection and subject to the consideration of factors required by Water Code Section 13241. Once water quality objectives*

are properly adopted, then the Regional Board can better determine the appropriate water quality based effluent limitations necessary to meet and maintain the adopted water quality objectives.

See response to Comment #2.

12. *CVCWA supports the re-evaluation of the recently adopted water quality objectives for diazinon in the Sacramento and Feather Rivers in light of new information discovered in May of 2004.*

See response to Comment #4.

13. *CVCWA supports the issue of ground water surveys and development of control policies for discharges to groundwater and encourages the Regional Board to designate it as a high priority. Once designated as a high priority, CVCWA encourages the Regional Board to work with the State Board to accomplish this task using a collaborative, stakeholder process.*

The State Water Board is implementing a Groundwater Ambient Monitoring and Assessment program (GAMA) to monitor ground water. However, due to limited resources, the State Water Board has scheduled monitoring of priority basins to be completed on a ten-year schedule. See Issue No. 14 for more details on this issue.

14. *Supports the development and adoption of water quality objectives for ammonia and chlorine in accordance with Porter-Cologne and especially Section 13241 of the Water Code and its mandated considerations.*

See response to Comment #5.

15. *The Regional Board should develop a policy that recognizes that on-line real-time continuous monitoring and reporting requirements should have provisions to address periods of analyzer downtime due to routine and non-routine maintenance activities (currently subject to minimum mandatory penalties due to instrumentation issues).*

Effluent and receiving water monitoring requirements are part of the regulatory process and not the basin planning process.

16. *In reference to the issue of adding beneficial uses, a UAA must be conducted for such additions.*

A use attainability analysis is a scientific analysis to determine whether a use can be attained. Section 131.10(j) of Title 40 of the Code of Federal Regulations very specifically describes when a state must conduct a use attainability analysis. Note that for the “fishable and swimmable” beneficial uses, federal regulations require that a use attainability analysis be conducted to determine that these uses cannot

be attained in order to designate beneficial uses that do not provide full protection for these uses. All the waterbodies in the Sacramento River and San Joaquin River Basins have designated beneficial uses either directly identified in Table II-1 or indirectly through the “tributary rule.” If any waterbodies are identified that do not have designated beneficial uses, the non “fishable and swimmable” beneficial uses will be evaluated against the UAA criteria prior to designation. See Issue No. 1 for more details on this issue.

17. *The Regional Board should work with the State Board to develop a policy for conducting use attainability analyses. By having a set process in place, UAAs can be more efficient and cost effective for both designating and de-designating beneficial uses.*

There is no doubt that a set policy would be useful and efficient. However, as explained when the Central Valley Water Board embarked on conducting the UAA for Old Alamo Creek, the process is new to California and there are no guarantees on the outcomes. In addition, it should have been clarified that there are also no guarantees that the initial process would be trouble free and be a perfect template for future projects. Staff found that there were a number of unexpected obstacles as the process proceeded. Staff will prepare an issue paper describing what transpired in developing the UAA for Old Alamo Creek and where improvements can be made.

18. *The water quality objective for chemical constituents incorporates by reference primary and secondary maximum contaminant levels (MCLs), which are drinking water standards adopted by the Department of Health Services. The secondary MCLs are recommendations based on consumer acceptance levels and are therefore unrelated to human health and welfare or the protection of aquatic life. As set forth in the Basin Plan, the secondary MCLs apply directly to the receiving waters. Such an application does not account for the fact that all drinking water must be filtered (or meet specific turbidity requirement) prior to use by consumers for drinking water. The application of secondary MCLs to natural waterways is inappropriate when one considers the aesthetic basis for secondary MCLs and the treatment that will occur prior to use by consumers. If there are specific secondary MCLs that the Regional Board deems necessary to protect uses of the Region’s waterways, the Regional Board should adopt water quality objectives for those constituents pursuant to Porter-Cologne.*

See response to Comment #6.

19. *The pesticide objective for the Sacramento and San Joaquin River Basins includes an objective for chlorinated hydrocarbon pesticides that states that they “shall not be present in the water column at concentrations detectable within the accuracy of analytical methods approved by the Environmental Protection Agency or the Executive Officer.” (Basin Plan, III.6.00, 1998.) This provision was adopted into the Basin Plan in 1975 and was classified as an interim objective by*

the Regional Board due to a lack of information regarding tolerance levels. (A Review of the Administrative Record for the Central Valley's Water Quality Control Plan 1975-1994, September 2003, pg. 32.) By classifying the pesticide objective as an interim objective, the Regional Board intended develop specific numeric objectives as part of the triennial review process. (Review at pg. 32.) However, such follow-up actions have never occurred. As a result, the objective fluctuates with the accuracy of analytical methods rather than being based on the appropriate level to protect the uses of the waterways of the Sacramento and San Joaquin River Basins. Consequently, the non-detect standard should be removed from the Basin Plan.

The Basin Plan does not indicate that this is an interim provision. Until such time as the Central Valley Water Board determines that a more appropriate standard is needed and completes a basin planning process to amend such a standard into the Basin Plan, the existing standards apply.

20. *The Regional Board should develop a policy that explains how to interpret three species chronic toxicity tests to determine if the narrative "no toxics in toxic amounts" water quality objective has been violated. Currently, Regional Board staff are establishing different standards in different permits therefore causing confusion and uncertainty amongst the various wastewater agencies through the Central Valley.*

See response to Comment #7.

21. *The Basin Plan should provide the ability to report on-line real-time continuous pH monitoring consistent with federal effluent guidelines and standards found at 40 CFR Part 401.17 pH Effluent Limitations Under Continuous Monitoring. This approach takes into account short-term spikes and averaging periods necessary for continuous monitoring measurements and is found in the reporting requirements for some Central Valley NPDES permittees and not for others.*

See response to Comment #15.

Steve Beckley, CEO/President, Western Plant Health Association

22. *If the Regional Board decides to adopt water quality objectives for any pesticides, it must follow the procedural and substantive requirements contained in the Porter-Cologne Water Quality Control Act. As part of these requirements, the Regional Board must determine if the beneficial use for which the objective is being adopted is a reasonable use for that water body.*

The Central Valley Water Board will follow the requirements in the Porter-Cologne Water Quality Control Act when adopting water quality objectives. In a water body where beneficial uses are already designated, the Water Board does

not have to reconfirm that any particular beneficial uses exist in order to develop a water quality objective for the water body.

23. *The Regional Board should consider deleting or amending the non-detect water quality objective for chlorinated hydrocarbon pesticides. A non-detect standard is not an appropriate water quality objective for it does not actually take into account the level of water quality necessary for the protection of beneficial uses. Also, it is a moving target since analytical methods continue to become more sophisticated resulting in the ability for pesticides to be detected at very low levels. Detection of pesticides at very low levels does not alone indicate if there is an adverse impact to water quality. To properly determine impacts to water quality and the water environment, the Regional Board and others should consider all of the various parameters, including chemical, physical and biological.*

See response to Comment #19.

Michael E. Aceituno, Supervisor, Sacramento Area Office, National Marine Fisheries Service

24. *The amendment to add a control program to address the dissolved oxygen impairment in the Stockton Deep Water Ship Channel does not ensure adequate reduced impacts to oxygen levels from current and future water right permits, as well as existing and future water resource facilities. Current water right permits and resource facilities should be evaluated immediately and their impacts reduced in coordination with other parties in the San Joaquin Basin. Future water right permits and facilities should be required to show a “no effect” to the dissolved oxygen problem prior to acceptance. Actions to solve the dissolved oxygen impairment in the Ship Channel must be approached on a San Joaquin Basin-wide scale, as water withdrawals in particular areas affect the entire Basin including the dissolved oxygen levels in the Ship Channel.*

While the impact of water withdrawals have an impact on the dissolved oxygen levels in the Ship Channel, waste discharges and channel configuration also impact dissolved oxygen levels. Controlling any of these three factors will lead to attainment of the dissolved oxygen water quality objectives so the basin plan amendment provides an implementation program that addresses all three factors. Focusing on only one of the factors was already addressed in the implementation program and is premature. In recognition that the Central Valley Water Board does not have authority over water rights, which are the purview of the State Water Board, the Basin Plan Amendment contains the following recommendations for the State Water Board:

"The State Water Board should consider amending water right permits for existing activities that reduce flow through the DWSC to require that the associated impacts on excess net oxygen demand conditions in the DWSC be

evaluated and their impacts reduced in accordance with the Control Program for Factors Contributing to the Dissolved Oxygen Impairment in the DWSC."

"The State Water Board should consider requiring evaluation and full mitigation of the potential impacts of future water right permits or water transfer applications on reduced flow and excess net oxygen demand conditions in the DWSC."

25. *The Regional Board should set water quality and temperature objectives that fully attain all designated beneficial uses in Sacramento and San Joaquin Basin tributaries. Specific flow and temperature conditions believed sufficient to attain the population objectives and recovery of listed fish should be determined and included in the Basin Plan.*

The Central Valley Water Board agrees that temperature is a concern. See Issue No. 9 for more details regarding the development of temperature objectives. The Central Valley Water Board has no jurisdiction over flow in waterbodies. Flow issues should be presented to the State Water Board for its consideration.

Ms. Kathleen Martyn Goforth, Water Quality Standards Coordinator, US Environmental Protection Agency

26. *Resolve Disapproved Amendments re. Tributary Rule and Delta Dissolved Oxygen: On 26 May 2000, USEPA disapproved three of the amendments from the 1994 rewrite of the Basin Plan. The disapproved amendments related to the tributary rule, the dissolved oxygen objectives in the Delta and language regarding the federal antidegradation language. The Regional Board adopted amendments addressing the tributary rule and the federal antidegradation language, however, only the amendment addressing the federal antidegradation language has been submitted to and approved by USEPA. The amendment addressing the tributary rule was withdrawn from State Board consideration in 2003. USEPA encourages the Regional Board to complete the process of approving this amendment.*

In regards to the Delta dissolved oxygen objectives, the disapproval can be partially resolved by the deletion of the exception for Delta water bodies "which are constructed for special purposes and from which fish have been excluded or where the fishery is not important as a beneficial use." To fully address the disapproval, the Regional Board would need to assess current and attainable dissolved oxygen conditions in the Delta to develop appropriate objectives. USEPA encourages the Regional Board to make these studies a high priority.

The Executive Officer withdrew the amendment addressing the tributary rule pending the resolution of ongoing litigation. The Central Valley Water Board will consider this amendment when the litigation is settled.

In regards to the dissolved oxygen objectives, see Issue No. 18 for more details on the status of this issue.

27. *Designate Recreational Uses for Grassland Wetland Water Supply Channels: In its 24 May 2000 action on the 1996 “Grassland amendments” to the Basin Plan, USEPA reserved action on the omission of the REC-1 and REC-2 uses for the Grassland wetland water supply channels pending the Regional Board’s submission of additional information from the administrative record to justify this omission. During this triennial review, the Regional Board should either submit the necessary information to USEPA to justify omission of the REC-1 and REC-2 uses or amend the Basin Plan to designate these uses for the Grassland wetland water supply channels.*

During this triennial review period, staff intends to continue gathering information regarding the dangers of incidental contact with these types of waterbodies and the lack of accessibility to justify omission of the REC-1 and REC-2 beneficial uses from the Grassland wetland water supply channels.

28. *Update Numeric Objectives for Toxic Pollutants: Since the promulgation of the California Toxics Rule (CTR) in 2000, USEPA has published updated guidance for 98 pollutants, pursuant to section 304(a) of the Clean Water Act. The Regional Board should review the Basin Plan objectives and the CTR criteria against the current 304(a) criteria guidance to determine whether amendments are needed to the water quality objectives in the Basin Plan to ensure that beneficial uses are protected.*

Although the California Toxics Rule was promulgated in 2000, the Central Valley Water Board is still implementing those standards. The Central Valley Water Board considers it a higher priority to completely implement the promulgated rule than to re-evaluate the toxic pollutants. See Issue No. 19 for more details on this issue.

29. *Add Mendota Pool to Table II-1 and Reconsider Selenium Objectives for Delta-Mendota Canal: While the Mendota Pool is on the State’s Clean Water Act Section 303(d) list of impaired waters due to elevated concentrations of selenium, it’s beneficial uses do not appear to be specifically identified on Table II-1 of the Basin Plan. For clarity, the beneficial uses of Mendota Pool should be identified in Table II-1.*

When listing the Mendota Pool as impaired by selenium, the State noted that the Delta-Mendota Canal is likely a primary contributor of selenium to the Pool. The Pool is subject to the Basin Plan’s site specific selenium objective of 2 ppb monthly mean, but the Canal is subject to the CTR criterion of 5 ppb as a 4-day average. In order to protect the beneficial uses of Mendota Pool, the Regional Board should consider whether a more protective selenium objective should be applied to the Canal.

While the Mendota Pool itself is not named in Table II-1 of the Basin Plan, the Pool is part of the San Joaquin River and is part of the reach named “Friant Dam to Mendota Pool.” This might appear inconsistent since other impoundments are specifically identified but the reason that they were identified is because their uses are different than the river that they are part of.

In regards to the selenium objectives, when the Total Maximum Daily Load calculations for selenium are conducted for Mendota Pool, the water quality objectives will be reviewed and all contributions to the Pool will be evaluated and appropriate loads will be assigned.

30. *Adopt Fresh Water Bacteria Criteria Consistent with EPA’s 1986 Bacteria Guidance: The Basin Plan’s fecal coliform-based water quality objectives for bacteria are outdated. Since 1986, EPA has recommended the use of Escherichia coli (E. coli) or enterococci as an indicator for the protection of primary contact recreation. Either the Regional Board or the State Board should adopt bacteria objectives consistent with EPA’s 1986 guidance.*

California has begun a process of evaluating the EPA Guidance to develop and adopt freshwater bacteria standards. The State Water Board staff expects to bring this item before the State Water Board in June 2006. Central Valley Water Board staff is assisting State Water Board staff in this effort. See Issue No. 12 for more details on this issue.

31. *Develop Temperature Criteria to Protect Chinook Salmon and Central Valley Steelhead: In 2003, EPA Region 10 issued regional guidance for developing numeric temperature standards for the Pacific Northwest to protect cold water (salmonid) beneficial uses. This guidance was endorsed by both NOAA Fisheries and the U.S. Fish and Wildlife Service (FWS). While EPA Region 9 has not adopted similar guidance, we generally support the scientific approach proposed in this guidance, which recognizes the factors of biology, life stage/timing, and the natural thermal patterns. We are discussing the merits of this approach with the North Coast Regional Water Quality Control Board and would be interested in a similar conversation with the Central Valley Regional Board technical staff and the appropriate offices of NOAA and FWS during this triennial review.*

The Central Valley Water Board agrees that temperature is a concern. See Issue No. 9 for more details regarding the development of temperature objectives.

32. *Follow Through on Water Quality Standards Amendments Associated with TMDLs: The Regional Board has several TMDLs under development, and many more awaiting initiation. Some of these TMDLs may require revision to beneficial uses, water quality objectives, or policies on implementation, but resources are not currently available to complete this work. We recognize that resources are limited, and encourage the Regional Board to consider options for*

re-allocating resources, as needed, to ensure appropriate basin planning follow-through on TMDLs.

Comment noted.

33. *Continue Development of Drinking Water Policy: The Regional Board should continue its work on development of a Central Valley drinking water policy as a high priority.*

Comment noted.

Mr. John Hewitt, Esq., California Farm Bureau Federation

34. *Provide periodic updates to the public regarding available staff resources and likelihood of implementation: Transparency and periodic updates of the availability of resources to implement the highest priority issues identified in the triennial review process is crucial in ensuring this process is the backbone of coordinated, well thought thorough water quality planning and not just a periodic exercise in futility.*

The Executive Officer provides an annual program update on basin planning to the Central Valley Water Board. In addition, the monthly Executive Officer's report contains status reports on basin plan amendments in progress. The Central Valley Water Board also receives regular budget updates. All of these reports are available for public review.

35. *Develop a Plan to Systematically Address the Tributary Rule: The Regional board should look to their past policy documents and publications to initiate dialog with stakeholders, other agencies, and states with the goal of developing a planning process in which tributaries are to be investigated and proper beneficial uses assigned or removed. Farm Bureau appreciates the magnitude of this endeavor, however, we believe a well-prioritized process that is enlightened by public input is superior to ad-hoc adjustments driven by State Board order or judicial mandate.*

The Central Valley Water Board has recognized that the beneficial uses of ephemeral, intermittent or low-flow waterbodies that are dominated by effluent or agricultural supply/drainage waters are a high priority. See Issues No. 2 and 3 for more details regarding these issues.

Mr. William Busath, City of Sacramento

36. *Supports prioritizing effluent dominated water bodies, the drinking water policy, TMDLs and bacteria objectives for this triennial review period.*

Comment noted.

37. *Bacteria Standards: Supports the amendment to revise the bacteria indicator from fecal coliform to E. coli but would like inclusion of an exception for wet weather conditions when natural runoff contains elevated levels of bacteria indicator organisms. In addition, supports an amendment to account for seasonality in the REC-1 beneficial use by recognizing that body contact recreation is much less likely to occur during wet weather conditions.*

See response to Comment #30.

38. *Beneficial Use Identification: The Regional Board should evaluate the REC-1 beneficial use to add a seasonality component, develop and assign a special MUN designation for tributaries, and evaluate Sacramento-area urban creeks for the appropriateness of the WARM and COLD beneficial uses.*

The Central Valley Water Board has not received compelling evidence that water contact recreation has a great enough seasonal component to justify development of a seasonal sub-categorization. Concerns regarding MUN, WARM and COLD beneficial uses have been expressed in relationship to the effluent and the agricultural dominated waterbodies issues. See Issue Nos. 1, 2 and 3 for more details on these issues.

39. *Title 22 Standards: The Regional Board should evaluate whether the use of all the Title 22 Standards in receiving waters is appropriate when Title 22 Standards are user-end drinking water standards that are normally applied after water treatment processes.*

See response to Comment #6.

40. *Fish and Game Standard for Diazinon: The Regional Board should re-evaluate the diazinon water quality objectives to reflect the Department of Fish and Game re-calculation of acute and chronic criteria.*

See response to Comment #4.

41. *The Regional Board should support the State Board in development of a statewide stormwater policy. At the end of the State Board's ongoing efforts to develop a long overdue Statewide Stormwater Policy, the Regional Board should align the Basin Plan with that policy.*

Central Valley Water Board staff will work with State Water Board staff on the development of any statewide stormwater Policy. State Water Board plans and policies generally supercede Central Valley Water Board plans and policies to the extent of any conflicts so alignment of the Basin Plan with adopted statewide policies is unnecessary. However, in the interest of providing a one-stop shop for

applicable regulations, as staff resources are available, the Basin Plan will be updated to reflect new and revised statewide Plans and Policies.

Mr. Steven Shaffer, Director, Department of Food and Agriculture

42. *Assign appropriate beneficial uses: The Regional Board should designate appropriate beneficial uses for agricultural dominated waterbodies that places a priority on the function of the water body over the incidental uses. These waterbodies were highly altered to provide for flood protection, provide water supply during the dry season and droughts, and to export water to other regions of the state. By virtue of the current Regional Board regulatory process and the so-called "tributary rule," beneficial uses for the San Joaquin and Sacramento Rivers are assumed to agricultural water bodies. These include cold and warm water fishery habitat, migration and contact recreation. Not only are these uses generally not supported in agricultural water bodies they should be discouraged as they lead to unproductive spawning and hazardous conditions for contact recreation. By their mere presence, agricultural dominated water bodies provide flows and create a limited aquatic habitat. Some fisheries may be even present, such as carp and mosquito fish. By their presence they may present recreational opportunities such as swimming, although hazardous. These uses are incidental and should not take precedence over or interfere and prevent the function for which the channel was created or modified for.*

See response to Comment #35.

43. *Water Quality Objectives: In many cases the Regional Board does not rely on the Basin Plan water quality objectives but refers to external reports and guidance to develop water quality objectives to be used in permit limits. It does this on a case-by-case basis. This procedure shortcuts the process that the Water Code has laid out for establishing water quality objectives in water quality control plans. The Regional Board should use adopted water quality objectives that have undergone the appropriate statutory considerations, reviews and approvals.*

The Basin Plan contains a narrative toxicity objective that states, in summary, that all waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. The Basin Plan contains implementation policies on compliance with that objective and other narrative objectives. Compliance with the objective is determined by analyses of indicator organisms, species diversity, population density, growth anomalies, and biotoxicity tests of appropriate duration or other methods as specified by the Central Valley Water Board. Where compliance with narrative objectives is required to protect beneficial uses, the Central Valley Water Board adopts, on a case-by-case basis in waste discharge requirements and other orders, numerical limitations that will implement or translate the narrative objectives. The Basin Plan expressly allows the Central Valley Water Board to consider numerical criteria and guidelines developed by other agencies and

organizations. See the Central Valley Water Board Policy for Application of Water Quality Objectives in Chapter IV of the Basin Plan. This method of implementing narrative objectives is also authorized by applicable federal regulations (See 40CFR-122.44(d)(1)(vi)(B)). When the Central Valley Water Board uses a numerical limitation to translate a narrative water quality objective, the Central Valley Water Board is implementing an existing water quality objective.

Mr. Norman S. Johnson, Vice President, Mining Remedial Recovery Company

44. *The Basin Plan should include provisions or procedures to evaluate and identify appropriate beneficial uses for stream segments covered by the “tributary rule” other than the UAA process, which is both political and expensive.*

The “tributary rule” is consistent with the Clean Water Act which requires States to presume that “fishable and swimmable” uses are attainable and must be designated unless a use attainability analysis (UAA) is completed that shows these uses are unattainable. See response to Comment #17.

Mr. Warren Tellefson, Central Valley Clean Water Association

45. *The Basin Plan standards are old and may no longer be adequate so they should all be reviewed.*

See response to Comment #9.

46. *The incorporation-by-references of the secondary MCLs should be removed because the secondary MCLs are not public health related but based on aesthetics. Instead each of these constituents should be evaluated to see which ones should apply. In addition, they should be evaluated to determine whether the standards should be based on the dissolved rather than total forms.*

See response to Comment #6.

47. *The Board should develop a policy on how to conduct a UAA and incorporate this policy into the basin plan for use in both designating and de-designating uses.*

See response to Comment #17.

48. *The Groundwater Survey and Control Policies issues, which were listed as medium priority at the last triennial review, should be raised to a high priority and State Board should be requested to work on this as a statewide policy.*

See response to Comment #13.

Ms. Jane Vorpapel, CA Department of Fish and Game, Region 1

49. *The Department of Fish and Game submitted written comments during a previous triennial review with temperature recommendations to protect spring-run Chinook salmon and steelhead. These previous comments included the names of critical streams above a certain elevation in northern California and the times of year that the temperature objectives ought to apply in order to protect the spawning of the salmon and steelhead.*

See response to Comment #31.

50. *The Department of Fish and Game supports the development of ammonia and chlorine objectives for the protection of fisheries.*

See response to Comment #5.

Mr. Mark O'Brien, Port of Stockton

51. *The Board should re-evaluate the designated beneficial uses of surface and ground water in the Delta recognizing the historic brackish system and the actual background water quality based on soil conditions.*

The water quality standards, which include both beneficial uses and water quality objectives, are consistent with the State's goal that the Delta provide a freshwater municipal and domestic drinking water supply. In accordance with this goal, the State Water Board has required that Delta operations be managed to optimize the availability of freshwater for this use while protecting all the other beneficial uses of the Delta. In this case, regardless of historic salinity levels, the Delta must attain freshwater standards and that must be reflected in the Basin Plan.

52. *The Board should reconsider the appropriateness of using the citrate acid WET test on dredged material rather than the DI WET test or the USEPA Synthetic Precipitation Leaching Procedure in order to assess the potential threats to water quality from the dredged materials under ambient weather conditions.*

Determination of appropriate analytical methods is part of the regulatory process and is not part of the basin planning process.

53. *The Board should develop a policy that considers the net benefit that dredging provides by removing mercury from the system when developing discharge requirements.*

A Water Board policy is unnecessary. Section 13000 of the Porter Cologne Water Quality Control Act contains a Legislative finding that the State should regulate activities and factors "to attain the highest water quality which is reasonable, considering all demands being made and to be made on those waters and the total

values involved, beneficial and detrimental, economic and social, tangible and intangible.” The Central Valley Water Board has consistently required that waste discharges, even those with beneficial impacts, be regulated to prevent impact on any of the designated uses. While the Central Valley Water Board appreciates that dredging provides for the maintenance of some beneficial uses and may even provide non-water quality benefits such as levee stability, waste discharges must be managed so that there are no detrimental effects on any of the designated uses.

Mr. Tony Francois, California Farm Bureau Federation

54. *The Board should make it a high priority to develop a framework for addressing agricultural dominated waterbodies. To assist in this effort, the California Farm Bureau Federation may be able to provide resources to scope this issue.*

See response to Comment #8.

Mr. Robert Roscoe, Sacramento Suburban Water District

55. *The Board needs to develop a uniform policy on groundwater banking and storage. This policy should consider that the State’s long-term vision for water supply includes groundwater banking and large quantities of grant funds are being provided for ASR (Aquifer Storage and Recovery) projects. The policy should clarify that groundwater banking is not a waste discharge activity but that groundwater banking is water storage for later use. In order to allow groundwater banking to occur, the point of compliance should be at monitoring wells some distance from the injection wells because it is impossible to have the injected water be the same quality as the native groundwater. The Board’s current treatment of groundwater banking can lead to public distrust of the current water supply (why is the banked water, which is what is being supplied to the consumer, being treated for injection?). Finally, the Region 5 practice is inconsistent with other parts of the State where other regional boards (with one exception) are not doing anything in regards to groundwater banking.*

See Issue No. 15 for more details on this issue.

Mr. John Headlee, US Army Corps of Engineers

56. *Imposition of the basin plan requirements adds restrictions and cost to dredging projects and makes them less likely to occur. The Board needs to develop a policy for dredging that recognizes that there are adverse impacts of not dredging and includes appropriate water quality standards. These adverse impacts could be more commercial traffic on land (and thus more air pollution), less removal of the sediments and the associated contaminants (mercury), and loss of use of the dredge materials for levee stabilization. An example of a basin plan requirement that causes difficulty is the arsenic limit. The dredge effluent requirement is 2.5 ppb. This seems unnecessarily restrictive when the drinking water limit is 10 ppb.*

The Board should reconsider imposing public health goals on dredging, especially after considering the Porter Cologne requirement of reasonable regulation. The Board should re-evaluate “legacy” [old] basin plan standards such as barium. The Board should also reconsider application of the full dissolved oxygen requirement at the bottom of streams. And the Board should not regulate for discharge to agricultural ditches but should apply water quality standards to the rivers.

See response to Comment #53 regarding a Central Valley Water Board policy on dredging. The additional costs to dredging operations in order to meet the water quality objectives are indirect environmental impacts that would be considered at the time the Central Valley Water Board considers adoption of plans and policies and not after the plans and policies have been adopted, approved and are being implemented. The possibility that dredging would not occur is as a result of the Central Valley Water Board’s plans and policies is speculative unless the Board prohibits this activity. The Central Valley Water Board has not prohibited dredging nor does it have any plans to pursue such a prohibition therefore a policy that speculates on this possibility is inappropriate. The need to comply with the Basin Plan standards is now greater than ever as there are concerns over the decline of species used to indicate the health of the Delta. It would be inappropriate for the Central Valley Water Board to relax its standards for any discharge categories without adequate justification. And, since “agricultural ditches” make up a significant amount of the water in the Region, it is inappropriate to categorically exclude them from regulation.

Mr. Ed Yates, California League of Food Processors

57. *Will the drinking water policy issue would amend Resolution 88-63.*

It is anticipated that the drinking water policy would be a new basin plan policy and be completely separate from Resolution 88-63.

58. *The Board should review the Sources of Drinking Water Policy (Resolution 88-63) to consider new information, particularly new groundwater information.*

The Sources of Drinking Water Policy is a statewide policy and is the jurisdiction of the State Water Board. The Central Valley Water Board has no jurisdiction to review statewide policies.

59. *The Board should review the Water Reclamation Policy, which previously encouraged food processors to reuse/recycle their wastes and make judicious use of water.*

While the State Water Reclamation Policy (State Water Board Resolution No. 77-1) encourages the development of water reclamation facilities and water conservation, the Policy also recognized the need to protect public health and the

environment in the implementation of reclamation projects. These goals are still consistent with State goals and objectives.

Mr. Robert Roscoe, Sacramento Suburban Water District

60. *The Regional Board should create uniform policies relative to regulation of groundwater banking and aquifer recharge. Groundwater banking, artificial recharge and aquifer storage and recovery programs (ASR) are critical elements in the State Water Supply Plan and are supported by state bond funds. Requiring that water suitable for drinking water be treated prior to storing in an aquifer for later withdrawal for human consumption can erode public confidence in the safety of the state's drinking water supplies. Where the source of water is a state permitted public water supply, groundwater banking through artificial recharge methods should not be regulated as a waste discharge. In addition, the lack of consistency between the regional boards on this issue puts the water purveyors in the Central Valley at a disadvantage in applying for statewide competitive funds conjunctive use and ASR projects. The nine regional boards should start statewide policy discussions amongst the Boards, the Department of Health Services and the Department of Water Resources.*

See response to Comment No. 55.

Dr. G. Fred Lee

61. *The Board should be aware that there are a number of issues that must be considered regarding groundwater recharge projects that inject the recharge water directly into the aquifer. One of these issues is maintaining the quality and function of the aquifer. Water that meets the drinking water standards contains unregulated constituents that are not a human health concern, such as total and dissolved organic carbon, which may impair the ability of aquifers to continue to function and produce high quality waters. Additional concerns are that the drinking water standards are not based on protection of human health, but on social, economic, political and other factors. Thus, additional treatment is needed to prevent unregulated constituents from accumulating in the aquifer which can damage its ability to serve as a source of water supply. Finally, some of the proposed projects use valley floor waters that contain treated domestic wastewater and agricultural runoff. In December 2004, the Department of Health Services issued draft regulations governing recharge with water that contains some recycled water (i.e. direct inclusion of highly treated domestic wastewaters without intervening discharge to a natural water body). These regulations require treatment with reverse osmosis prior to injection. For surface infiltration based recharge systems, the draft regulations require that the amount of total organic carbon be restricted. However, the Department of Health Services has limited regulatory authority over the recharge of surface waters where a municipality discharges domestic wastewaters to a water body that, at some location downstream, is recharged to an aquifer. Also, the Department has*

limited authority to regulate the recharge of surface waters that are primarily composed of agricultural tailwater.

See response to Comment No. 55.

Mr. Donald B. Koch, Department of Fish and Game, Northern California-North Coast Region

62. *Specific temperature objectives need to be adopted for reaches above an elevation of 700 feet above sea level of Mill, Deer, Battle, Butte, Antelope, Clear, Beegum and Big Chico creeks to protect for spring-run salmon and steelhead.*

See response to Comment No. 31.

63. *A beneficial use designation addressing flood peak attenuation and flood water storage is needed. This beneficial use should be defined as use of riparian wetlands in flood plain areas and other wetlands that receive natural surface drainage and buffer its passage to receiving waters.*

Staff has not established that these beneficial uses ought to apply within the Sacramento River and San Joaquin River Basins since staff is not aware of water quality objectives specific to these uses. This comment will be forwarded to the State Water Board for statewide consideration.