

6. Big Valley Rancheria Band of Pomo Indians (BVR)

Sarah Ryan (Environmental Director)

Letter date: 7 April 2010

BVR Comment #1.

The Big Valley Rancheria Band of Pomo Indians wishes to make comments on the above referenced proposed TMDL.

We would like to start with thanking the staff, particularly Janice Cooke, for their timeliness in responding to our questions and requests for information.

The Tribe has not been involved in this Basin Plan Amendment (BPA) long – we became aware of it in late fall 2009. At that time, several Tribes that are connected culturally to the Bay Delta realized that this process had been occurring for several years and there was a concern that there was no time to meaningfully participate in the process. Fortunately, a meeting was quickly arranged between US EPA, Regional Board staff and a handful of the concerned Tribes. The comments that we are submitting today are reflective of what we discussed at that meeting.

Although Regional Board staff included the Tribes once we reached out to the existing stakeholder group in late fall 2009, in no way was the original stakeholder process and outreach successful in reaching Tribes. It has become apparent that the ‘defining’ process for Regional Board is whether the Tribe owns land in the vicinity, not their ancestral boundaries where cultural activities, ceremonies and other Tribally sensitive activities occur. We hope that our involvement to date in this proposed TMDL has educated Regional Board staff about not limiting outreach to Tribes solely based on project location.

Response: Staff appreciates the efforts of the Big Valley Rancheria Band’s Environmental Director in the development of the BPA. Staff and the Executive Officer regret that tribes were not contacted and involved earlier in the process. Staff aims for respectful communication and collaboration with tribes and welcomes continuing education from tribes regarding their cultural activities and impacts of the TMDL.

BVR Comment #2.

- 1) Fish consumption data being used in the development of the BPA do not accurately reflect Tribal fish consumption. With the proposed fish tissue objective, Natives who depend on fish for culture and sustenance will be consuming poisonous levels of mercury. The proposed fish tissue objectives will not meet the beneficial use for potentially tens of thousands of consumers of Delta fish. The proposed fish tissue objectives should be modified to reflect the consumption rates of subsistence fishers. The fish tissue target of 32 grams per day is not protective of Tribes who consume the fish in the Bay Delta for subsistence, traditional or ceremonial use.

Response: The Central Valley Water Board adopts beneficial uses, water quality objectives and implementation programs consistent with State and Federal laws and regulations. State and Federal laws and regulations include provisions and requirements to base basin plan amendments on sound scientific rationale. Parts of the Delta that currently meet the proposed fish tissue objective while other parts do not. However, the available scientific information does not include an explanation on what activities, management practices, and treatment technologies assure the consistent attainment of the proposed fish tissue objective. The Basin Plan Amendment provides the opportunity for responsible parties to explore these scientific issues during Phase 1 with the

expectation that all of the Delta should be able to achieve the fish tissue objectives that are currently met in parts of the Delta. Therefore, there is sound scientific rationale for expecting to achieve the proposed fish tissue objectives. However, the fish tissue target requested by the Commenter is not met anywhere in the Delta. Without an understanding for what activities, management practices, and treatment technologies are available to reduce concentrations of methylmercury, there is no sound scientific rationale for the Central Valley Water Board to require the more stringent fish tissue objectives. The Central Valley Water Board is not unsympathetic to the concerns of the Commenter since the Central Valley Water Board recognizes that some consumers of Delta fish consume higher quantities of fish. The Basin Plan amendments direct the Regional Board to review the water quality objectives after Phase 1 to determine whether lower objectives can be achieved.

Staff agrees that the water quality objectives should be as protective as possible. However, staff must also show that the TMDL, with the objectives, has a reasonable assurance of being achieved. Staff believes that the recommended water quality objective based on the USEPA 32 g/day of trophic level 3 and 4 fish will be met but that more stringent objectives may not be reached. In a survey of mercury concentrations in fish from 626 sites in 12 western states, a fish tissue concentration of 0.05 mg/kg (which corresponds to 4-5 fish meals per week) is not observed even in pristine streams (Environmental Science and Technology 2007, vol 41 pg 58-65). Note that the most recent Delta fish advisories identify some fish and shellfish that may safely be eaten at three servings per week by the most sensitive groups (pregnant and nursing women and children). A goal of the TMDL is to reduce methylmercury levels so that the fish that are now highest in mercury may be safely eaten once per week.

BVR Comment #3.

We support BPA Alternative 5 which is protective of people who eat the subsistence level of TL3 and TL4 fish by recognizing that a segment of the population is consuming fish at a rate of 142 grams per day. This will ensure the Clean Water Act is being implemented because the beneficial use of fishing will be met. We understand that the Region 1 has adopted both the Native American Cultural (CUL) and Subsistence Fishing (FISH) use and we believe this should be adopted in this BPA as well.

Response: See response to BVR Comment #2 for staff's rationale for not recommending that the Regional Board adopt water quality objective alternative 5.

The Basin Plan of the North Coast Regional Water Board contains definitions of beneficial uses for Native American Culture (CUL) and Subsistence Fishing (FISH). However, the North Coast Regional Water Board has not identified any particular water bodies that support these beneficial uses. Note that the FISH beneficial use definition does not define consumption rate or species of fish consumed. Staff would like to coordinate with tribal council members and environmental officers to determine how these beneficial use designations, with the suggested additions for CUL, could be applied to the Delta and other Central Valley waterways. Species of fish commonly available now in the Delta are likely different than fish species that tribes traditionally consumed.

At this time, it is unclear if fish tissue mercury concentrations could be lowered to concentrations that could support subsistence fishing. Therefore, Board staff does not recommend that the Central Valley Water Board designate a subsistence fishing

beneficial use to the Delta but may do so in the future if additional information becomes available that indicates the use designation is appropriate for the Delta.

BVR Comment #4.

- 2) Regarding Phase I and Control Study Workplans: A nine year study period is unacceptable and should be reduced. The amount of time prior to implementation of the plan leaves fish eating populations vulnerable and this is an unacceptable risk. If anything, these workplans should be completed within the first two years of the effective date of the BPA.

Response: Staff's intent is to allow adequate time for effective studies, but not to allow studies to unnecessarily delay improvements if management practices become obvious. The proposed Basin Plan amendments state that during Phase 1, all dischargers should implement methylmercury management measures that are reasonable and feasible. The Basin Plan amendment text only states that for the purposes of achieving the methylmercury allocations, nonpoint source dischargers do not have to implement methylmercury controls until after the Phase 1 studies. Methylmercury controls need to be better identified, which is the purpose of the Phase 1 studies.

Dischargers must submit workplans for their Phase 1 control studies within 9 months of the effective date and must implement them within 4 months after submittal unless the Executive Officer (EO) provides the discharger with written notification that the EO needs more than 4 months to review and approve the workplans. Without an EO's extension of the workplan approval, the Basin Plan schedule means that dischargers must begin implementing the workplans and starting actual study work at 13 months after the effective date.

Staff agrees that fish consumers are still at risk while methylmercury and mercury source controls are being implemented. The Exposure Reduction Program is intended to reduce fish consumers' mercury exposure during this time. The Exposure Reduction Program is not a replacement for source controls and actual reductions in fish tissue mercury levels.

BVR Comment #5.

In addition, new mercury loading should not be permitted during Phase I of this BPA. According to Sec. 303(d)(4) (A) of the Clean Water Act, if a standard is not attained any waste load allocation established through a TMDL "may be revised only if (i) the cumulative effect of all such revised effluent limitations based on such total maximum daily load or waste load allocation will assure the attainment of such water quality standard."

Thank you for this opportunity to provide comment on this BPA.

We look forward to working with all partners to implement an effective TMDL and return the Delta to health that will re-establish local traditional food and the protection of culturally sensitive areas within the Watershed.

Response: The Basin Plan amendment requires that within-Delta sources reduce discharges of mercury (through pollution minimization programs and best management practices) from the start of Phase 1. Regarding methylmercury loading, please see

response to the comment letter from the California Indian Environmental Alliance and the Mechoopda Tribe. Thank you for your comments.

7. California Farm Bureau Federation (CFBF)

Kari E. Fisher (Associate Counsel, Natural Resources and Environmental Division)
Letter Date: 7 April 2010

CFBF Comment #1.

The California Farm Bureau Federation (“Farm Bureau”) is a non-governmental, non-profit, voluntary membership California corporation that’s purpose is to protect and promote agricultural interests throughout the state of California and to find solutions to the problems of the farm, the farm home, and the rural community. Farm Bureau is California’s largest farm organization, comprised of 53 county Farm Bureaus currently representing approximately 81,000 members in 56 counties. Farm Bureau strives to protect and improve the ability of farmers and ranchers engaged in production agriculture to provide a reliable supply of food and fiber through responsible stewardship of California’s resources.

Response: No response necessary.

CFBF Comment #2.

Farm Bureau appreciates the opportunity to comment on the Central Valley Regional Water Quality Control Board’s (“Regional Board”) Basin Plan Amendment for the Control of Methyl and Total Mercury in the Sacramento-San Joaquin Delta Estuary (“BPA”). Farm Bureau has submitted comments to the Regional Board throughout the development of the mercury TMDL and Basin Plan Amendment, as well as being an active member in the stakeholder process. Throughout the past several years, Farm Bureau has raised and continues to have serious concerns with various aspects of the proposed BPA. Before getting into specific concerns regarding the contents of the BPA, which we reserve the opportunity to provide at a later date, an overarching concern and fundamental flaw must first be raised and then addressed by staff because such a flaw impacts the entire contents of the BPA and thus, all comments on the contents itself. Specifically, Farm Bureau is greatly concerned with staff’s analysis and standards used in the BPA. The BPA does not conform to the requirements and standards set forth by the Porter-Cologne Water Quality Control Act (“Porter-Cologne Act”). Rather, as cited throughout the Staff Report, the BPA is based on inappropriate and arbitrary standards that are incorrectly utilized and relied upon to formulate the fundamental core of the water quality objectives that will be used to control methylmercury in the Delta.

Response:

Staff disagrees with the Farm Bureau’s comment that the documentation for the BPA is inappropriate and arbitrary. The documentation accompanying the BPA complies with all applicable federal and state laws and regulations.

CFBF Comment #3.

The Regional Board's Statutory Obligations Under the Porter-Cologne Act

In enacting the Porter-Cologne Act, the Legislature laid out specific goals and objectives for the State's waters. Regional Boards must conform to all such statutory mandates, including the Legislature's objective:

The Legislature further finds and declares that activities and factors which may affect the quality of the waters of the state shall be regulated 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.

(Wat. Code, § 13000, emphasis added.) In a recent decision, the California Supreme Court recently discussed the Legislature's intent, confirming its goal "to attain the highest quality which is reasonable." (*City of Burbank v. State Water Resources Control Bd.* (2005) 35 Cal. 4th 613, 619.)

The use of the term "reasonable" and the "reasonableness" standard is not limited to the express goals laid out in Water Code Section 13000. Rather, the Porter-Cologne Act expressly calls for reasonable actions throughout. Specifically, and of great importance is the direct language in Section 13241, the very section that governs the Regional Board's actions here. Section 13241 states:

Each regional board shall establish such water quality objectives in water quality control plans as in its judgment will ensure *the reasonable protection of beneficial uses* and the prevention of nuisance; however, it is recognized that it may be possible for the quality of water to be changed to some degree without unreasonably affecting beneficial uses. Factors to be considered by a regional board in establishing water quality objectives shall include, but not necessarily be limited to, all of the following:

- (a) Past, present, and probable future beneficial uses of water.
- (b) Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.
- (c) Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area.
- (d) Economic considerations.
- (e) The need for developing housing within the region.
- (f) The need to develop and use recycled water.

(Wat. Code, § 13241, emphasis added.) Section 13050(h) further defines "water quality objectives" as "the limits or levels of water quality constituents or characteristics which are established for *the reasonable protection of beneficial uses of water* or the prevention of nuisance within a specific area." (Wat. Code, § 13050(h), emphasis added.) Thus, when analyzing impacts to water quality, preparing or amending basin plans, and in establishing water quality objectives, the Regional Board must comply with and conform to the Legislative intent of the Porter-Cologne Act by applying the "reasonableness standard," that is, evaluate if the activity or control limit will *reasonably* protect the beneficial uses.

Response: The staff report occasionally refers to fully protecting beneficial uses. When adopting water quality objectives, there are a range of potential values that can protect the use. The objective that is adopted needs to fall in the range of values that protects the use (i.e., fully protects the use). The reasonableness factor is applied to determine what value in the range of fully protective values should be selected.

Staff conducted an analysis of whether the fish tissue objectives representing the full protection of the COMM beneficial use can reasonably be achieved. In the analysis, staff looked at global mercury cycling, background concentrations of mercury, current and projected sources of mercury, activities that could be implemented to reduce mercury loads and interrupt the methylmercury cycle, fish consumption statistics, health risks to consumers, fish tissue targets developed in for San Francisco Bay and other areas and many other factors. Staff concluded that the proposed fish tissue objectives could reasonably be achieved, were consistent with targets developed for San Francisco Bay and offered protection for a majority of the people. Staff developed alternative fish tissue objectives that would fully protect the beneficial use and are proposing fish tissue objectives that are consistent with Section 13241 of the Water Code with regards to providing reasonable protection of beneficial uses. The most stringent alternative represents the highest consumption rates reported for some consumers. However, the most stringent alternative is not recommended for adoption since staff was unable to show that fish tissue objectives that protect for the highest consumption rate was reasonably attainable.

CFBF Comment #4.

The Regional Board Applied an Arbitrary and Capricious Standard When Drafting the BPA

Although the Regional Board correctly cited its authority and obligation to “prepare and adopt Water Quality Control Plans, also known as Basin Plans, to regulate water quality,” the Regional Board arbitrarily and capriciously applied its authority when crafting the BPA. (Control of Methylmercury in the Delta, Draft Basin Plan Amendment Staff Report, p. 1 (hereinafter “BPA Staff Report”).) Specifically, the Regional Board did not apply the proper standard when analyzing the water quality impacts and creating the water quality objectives. Instead, as documented throughout the BPA, staff used “fully protect beneficial uses” as the standard in determining compliance limits, water quality objectives, analysis and comparison of alternatives, and in staff’s ultimate decision on the preferred alternative.

The Regional Board correctly summarized the importance of water quality objectives by stating: “Water quality objectives are established in Basin Plans by the Regional Water Boards to protect beneficial uses. Water quality objectives provide a specific basis for the measurement and maintenance of water quality. For this Basin Plan amendment, the objective that needs to be established to protect the beneficial use is methylmercury concentrations in fish tissue.” (BPA Staff Report, p. 13.) However, by failing to use the “reasonableness standard” when determining the water quality impacts and water quality objectives, the “specific basis for the measurement and maintenance of water quality” is improper and invalid.

The Regional Board cites no authority allowing the use of a standard to “fully protect and fully achieve beneficial uses.” Rather, the statutory authority laid out in the Porter-Cologne Act and cited within the BPA clearly and unequivocally calls for the “reasonable” protection of water. By using a different standard, the BPA is fundamentally flawed in its analysis.

Farm Bureau urges the Regional Board to base all conclusions, recommendations, and decisions regarding the methylmercury control program on sound scientific evidence and proper legal standards, and to provide appropriate citations. We look forward to further involvement and discussion with the Regional Board regarding potential controls of methylmercury and total mercury within the Delta and thank you for the opportunity to provide our comments and concerns.

Response:

Please see Board staff’s above response to CFBF Comment #3. The proposed water quality objectives are consistent with section 13241 of the Water Code.

8. California Rice Commission (CRC)

Paul Buttner (Manager of Environmental Affairs)

Letter Date: 14 April 2010

CRC Comment #1.

We are writing to provide comments on the Basin Plan Amendment (BPA) for the Control of Methyl and Total Mercury in the Sacramento-San Joaquin Delta Estuary. These comments are submitted on behalf of the 2,500 California rice growers that produce premium-quality rice on approximately 500,000 acres. About 95 percent of these acres are located in the Sacramento Valley. In addition to rice production, our fields provide critical habitat for 230 species of wildlife, including millions of migrating waterfowl and shorebirds along the Pacific Flyway. These fields are designated as Shorebird Habitat of International Significance by the Manomet Center for Conservation Science.

The California Rice Commission (CRC) appreciates the opportunity to work with your staff during the development of this BPA. We appreciated the opportunity to fully participate in the stakeholder workgroup and compliment your staff for its exemplary commitment to this process. We realize that you and your staff have worked very hard in an attempt to figure out a strategy for tackling this unique methyl mercury pollution situation considering the existing statutes designed to address such problems. It is for this reason that we regret the non-supportive position that we must convey in this letter.

Despite your dedicated, optimistic efforts, CRC believes that the adoption of this proposed program would represent poor public policy. It is well known that vast amounts of mercury are now widely distributed throughout the watershed in what we often refer to as the “legacy” component—mercury deposited from human activity tens of decades ago. Without effective control of this legacy component and naturally-occurring mineral soils and springs, which is very likely infeasible, real improvements in the fish tissue objective in the Delta will not be realized for a century or more. This clearly illustrates that time is really the only effective control measure.

Response: The Central Valley Water Board appreciates the participation of CRC in the stakeholder workgroup.

Staff disagree that it is inappropriate to go forward with a mercury control program for the Delta. Legacy¹ mercury may comprise only about 30% of total mercury entering the Delta [“Staff’s Initial Responses to Board and Stakeholder Questions and Comments at the April 2008 Hearing”² (see item A-1, pages 3 through 12)]. In addition, even if control actions are implemented to remediate legacy mercury in the Delta’s tributary watersheds, it would likely take natural processes many centuries to completely remove the legacy mercury already in Central Valley river beds and channels. Evidence supporting this assertion comes from the

¹ Board staff refers to mercury from historic mining operations in the Coast Ranges and Sierra Nevada that was released to Central Valley waterways by historic operations as well as by past and present erosion of excavated overburden and tailings as “legacy mercury”.

² Available at: http://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/central_valley_projects/delta_hg/stakeholder_meetings/25nov08_hearing_rtc.pdf

source analysis of total mercury that continues to enter the Delta years after the mercury and gold mining period and studies of contaminated sediment transport conducted elsewhere. The magnitude of legacy, mine-related mercury spread through river beds and banks downstream of major dams that continues to erode the Delta and difficulties in controlling these loads is discussed under Question #1 (page 3) and additional discussion about the time needed for natural processes to flush in-channel sediments from the Delta are included under Item #22 (page 44) in staff's "Initial Responses to Comments at the April 2008 Hearing".

As a result, even if legacy mercury loads could be reduced to zero, we would still need to be concerned about activities in and around the Delta that contribute methylmercury. Given available information about wetland restoration goals for the Delta (e.g. the Record of Decision (ROD) for the California Bay-Delta Authority commits it to restore 75,000 to 90,000 acres of additional seasonal and permanent wetlands in the Delta, which represents about a three to four times increase in wetland acreage from current conditions (about 21,000 acres)), and their potential to increase methylmercury loading to the Delta, we need to have a mercury control program that is more comprehensive and protective of the environment and subsistence fishers who cannot wait for centuries for improvements.

CRC Comment #2.

We believe that adopting a regulation with significant costs to California's economy that will not predictably achieve a stated regulatory standard (fish tissue objective) just because a federal agency requires such action is inappropriate. If the federal statute does not fit our unique methyl mercury problem in California, then the State's responsibility should be to report this finding to the U.S. Environmental Protection Agency and invite them to offer a more appropriate alternative compliance option.

CRC strongly recommends that the Central Valley Regional Water Quality Control Board recognize the inconsistency between its methyl mercury problem and the applicable statutory requirements by resisting the adoption of the proposed Methyl Mercury BPA. In our opinion, the implementation of this proposed regulation will not make significantly more progress towards the Delta fish tissue objective than a "no action" alternative.

We appreciate your consideration of our comments and respectfully request that they be fully considered by your Board as you consider action on the proposed BPA. Please feel free to contact me at (916) 387-2264 if you have any questions.

Response: The Central Valley Water Board is not addressing mercury in the Delta because a federal action requires the Board to do so; the Central Valley Water Board is addressing mercury because, as Finding 29 in the draft resolution before the Board points out, a "fishery with mercury-contaminated fish is an environmental justice issue and a threat to wildlife." In 1990, the State Water Board adopted the Clean Water Act 303(d) list that identified the Delta as impaired due to mercury pollution. In 1999, the Regional Water Board Toxic Hot Spots Clean-up Plan (California Water Code section 13394) adopted by the State Water Board identified mercury in the Delta as a toxic hot spot. The mercury impairment was based on human health advisories. The Central Valley Water Board decided that addressing the mercury impairment in the Delta is a priority due to its impact on people and wildlife that eat Delta fish and not because a federal agency requires it.

As explained in the response to CRC Comment #1, staff recognizes that addressing total mercury will take a very long time, which is why staff is proposing a control program that focuses on reducing methylmercury as well as inorganic mercury. While we may not be able to yet identify all the specific management practices and treatment technologies that will effectively reduce methylmercury loads, the proposed Basin Plan amendments provide an opportunity for stakeholders to conduct studies to assess the current situation and to identify opportunities to reduce the methylmercury in the Delta in an effective manner that does not impact other beneficial uses. The proposed Phase 1 Program Review provides an opportunity to refine the load and waste load allocations and implementation provisions and schedules among other elements of the proposed Basin Plan amendments.

9. Central Valley Clean Water Association (CVCWA)

Debbie Webster (Executive Officer)

Letter Date: 31 March 2010

CVCWA Comment #1.

Thank you for providing this opportunity to review and comment on the subject BPA and associated documents. The BPA and staff reports were made available for public review and comment in February 2010. Comments provided in this letter focus on the Central Valley Clean Water Association (CVCWA) members' significant issues with the BPA. Additional comments are provided in the attachment to this letter.

CVCWA is a consortium of publicly-owned treatment works (POTWs) in the Central Valley. CVCWA's primary purpose is to exchange information and provide a unified voice on regulatory issues impacting POTWs throughout the Central Valley. CVCWA has been an active participant in the Methylmercury Stakeholder Group. Our members want to continue to participate in effective solutions to difficult problems such as mercury. It is our intention that our comments below serve to improve the BPA, particularly in recognition that we already serve the public's interest by removing mercury from municipal wastewater and represent a *de minimus* source of methylmercury to the Delta.

As described below, there are four key comments that we still wish to bring to the attention of the Central Valley Regional Water Quality Control Board (Central Valley Water Board):

- Clarify Exposure Reduction Program Objectives and Requirements
- Do Not Impede Progress in Developing an Offsets Policy
- Appropriately Designate Beneficial Uses
- Remove the Long-Term Fish Consumption Goal

Detailed text edits and additional comments are provided in **Attachment A**.

Response: No response required.

CVCWA Comment #2.

Clarify Exposure Reduction Program Objectives and Requirements

Although CVCWA's members are not opposed to participating in exposure reduction efforts; the separately released, March 1, 2010 proposed Exposure Reduction Program raises several significant issues of concern. The text itself is unorganized and inconsistent, which is symptomatic of the lack of clarity in the mandate to require participation in an Exposure Reduction Program, leadership to organize participants, and funding to implement it. Due to the 218 process, funding is a significant legal issue for public agencies (especially smaller communities). Unfortunately, this element was added towards the end of the BPA process and CVCWA, other stakeholders, and the Central Valley Water Board staff have not had adequate time to collaborate on developing a program that is mutually satisfactory to all parties.

Proposed Edits: To address the BPA text itself, edits are provided in **Attachment B** as tracked changes. However, CVCWA also recommends relying on the Adaptive Management Approach for Implementing the Delta Methylmercury TMDL to the extent practicable to avoid misinterpretation of the BPA.

Response: CVCWA is correct that the exposure reduction text was worked on by the stakeholder group near the end of the process. The last few stakeholder meetings had focused discussions on exposure reduction, and several iterations of BPA text were proposed. There was general support to include exposure reduction requirements in the BPA, but there was no general consensus on which dischargers should be required to participate or which details to include in the BPA. The 1 March 2010 BPA for exposure reduction contains a schedule for stakeholders, including community-based organizations, to develop a strategy to identify who would participate in, fund, and implement an exposure reduction program. Staff agrees that the details of the program will be developed during Phase 1 of the TMDL. Staff considered many of the edits CVCWA proposed, and these are part of the Board's April 2010 agenda.

CVCWA Comment #3.

Do Not Impede Progress in Developing an Offsets Policy

Page BPA-2 states that "Adoption of a Mercury Offset Program for dischargers who cannot meet their load and waste load allocations after implementing *all* reasonable load reduction strategies *and can demonstrate no disproportionate impacts on local communities as a result.*" [Italics added for emphasis.] An offset project, by definition, trades an impact at one location for a greater benefit elsewhere, resulting in a net improvement to the environment at a lower overall cost. The qualification highlighted in the draft language is inconsistent with Principle #7 developed by the Stakeholder Group: "The control program should create strategies, including incentives to encourage innovative actions, to address the accumulation of MeHg in fish tissue and to reduce MeHg exposure, including watershed approaches, offsets projects, and short and long-term actions that result in reducing inorganic Hg and MeHg. Innovative and creative solutions such as offsets should not substitute for *reasonable actions to address local impacts.*" [Italics added for emphasis and comparison to the BPA text above.] It also over-states the key offsets principles stated on page BPA-13. The offset program can address localized impacts by, for example, requiring a higher credit ratio for cross-tributary projects.

Furthermore, the Stakeholder Group identified in the Adaptive Management Plan two main goals for an offset policy: (1) to provide more flexibility than the current regulatory system provides, to improve the environment in a shorter timeframe, and to reduce exposure to fish consumers while meeting regulatory requirements (i.e., load and wasteload allocations) at a lower overall cost; and (2) to promote watershed-based initiatives that encourage earlier and larger load reductions to the Delta than would occur without offsets. Both goals would be impeded if the qualifier remains.

Finally, such a statement of priority consideration for local communities conflicts with the values expressed in the Water Code, which requires the Central Valley Water Board to regulate "to the 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." [Wat. Code, § 13000, emphasis added.] In adopting a Mercury Offset Program, the Central Valley Water Board must consider the principles expressed in section 13000, and must balance all demands of the water, including impacts to local communities. However, as currently expressed, impacts to local communities would be the only or primary consideration. We recommend that this language be revised to be consistent with the principles expressed in the Water Code.

Proposed Edits: Edit the text (also at pages ES-2 to ES-3) as follows "Adoption of a Mercury Offset Program for dischargers who cannot meet their load and waste load allocations ~~after implementing through implementation of all~~ reasonable load reduction strategies ~~and can demonstrate no disproportionate impacts on local communities as a result~~".

Response: The text about offset projects, “Adoption of a Mercury Offset Program for dischargers who cannot meet their load and waste load allocations after implementing all reasonable load reduction strategies and can demonstrate no disproportionate impacts on local communities as a result,” was added during the stakeholder meetings with input from many dischargers. There were concerns that dischargers could conduct offset projects rather than control their discharges of mercury and methylmercury at the source. There were also concerns that offset projects should not be allowed where there would be additional impacts to local communities, or prevent or delay reducing impacts to local communities. This concept is included in Guiding Principle #7 which states “Innovative and creative solutions such as offsets should not substitute for reasonable actions to address local impacts.” In addition, BPA-13 contains a key principle regarding local impacts “Offsets should not be allowed in cases where local human or wildlife communities bear a disparate or disproportionate pollution burden as a result of the offset.”

CVCWA suggests that the text is significantly different than what was discussed at the stakeholder meetings, does not meet the intent of protecting local communities and needs to be modified to “Adoption of a Mercury Offset Program for dischargers who cannot meet their load and waste load allocations through implementation of reasonable load reduction strategies”. Staff is not recommending modifying this section of the BPA. This is one of many review considerations that the Board will be evaluating at the end of Phase 1. The mercury offset program developed in Phase 1 can further refine and define offset criteria, including criteria for determining “disproportionate impact”.

Staff does not see a conflict between the Basin Plan amendment text for the mercury offset program and Water Code Section 13000. Avoiding a disproportionate impact to water users downstream of a discharge is a logical consideration when evaluating the highest water quality that can reasonably be achieved considering all demands on the water. Public Resources Code section 71110 requires that “[t]he California Environmental Protection Agency [which the Water Boards are a part of], in designing its mission for programs, policies, and standards, shall do all of the following: (a) Conduct its programs, policies, and activities that substantially affect human health or the environment in a manner that ensures the fair treatment of people of all races, cultures, and income levels, including minority populations and low-income populations of the state. (b) Promote enforcement of all health and environmental statutes within its jurisdiction in a manner that ensures the fair treatment of people of all races, cultures, and income levels, including minority populations and low-income populations in the state. (c) Ensure greater public participation in the agency’s development, adoption, and implementation of environmental regulations and policies. (d) Improve research and data collection for programs within the agency relating to the health of, and environment of, people of all races, cultures, and income levels, including minority populations and low-income populations of the state. (e) Coordinate its efforts and share information with the United State Environmental Protection Agency. (f) Identify differential patterns of consumption of natural resources among people of different socioeconomic classifications for programs within the agency.”

CVCWA Comment #4.

Appropriately Designate Beneficial Uses

The BPA proposes to add a new designated beneficial use designation for commercial and sportfishing (COMM) to the Sacramento-San Joaquin Delta and Yolo Bypass waterways listed in Appendix 43. The COMM beneficial use is defined in the Basin Plan to mean “[u]ses of water for commercial or recreational collection of fish, shellfish, other organisms including, but not limited to, uses involving organisms intended for human consumption or bait purposes.” According to the Draft Staff Report, the goal of the BPA is to lower mercury levels in fish to protect beneficial uses associated with fishing and wildlife. The draft staff report provides no other information or justification as to why the COMM is the appropriate beneficial use for which the BPA is needed to protect.

When designating new beneficial uses, the state must determine if the use is attainable. Uses are deemed attainable if they can be achieved by the imposition of effluent limitations on point source dischargers and the imposition of cost-effective and reasonable best management practices for non-point source control. [See 40 C.F.R. § 131.10(d).] Because of the uncertainty associated with meeting allocations designed to protect the beneficial use, the BPA requires the Central Valley Water Board to review the Delta Mercury Control Program after Phase 1 to determine if, among other things, the wasteload and load allocations are attainable. The review should also address attainment of existing and proposed beneficial uses.

Furthermore, the language proposed implies that COMM is an existing use, and not just a potential beneficial use. Existing uses are defined as “those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards.” [40 C.F.R. § 131.3(e).] The Staff Report provides no evidence that COMM was actually attained in these water bodies on or after November 28, 1975. In light of this uncertainty, CVCWA finds it inappropriate to amend the Basin Plan to designate the COMM beneficial use to the Delta and Yolo Bypass waterways. CVCWA is especially concerned with the proposed amendment implying that COMM is an existing use, which is not the case.

Moreover, it is not necessary to amend the Basin Plan to include the COMM beneficial uses to these waterways to protect the fishing and wildlife uses identified in the BPA. The Basin Plan currently designates the Sacramento-San Joaquin Delta and the Yolo Bypass with recreation (REC-1) and wildlife (WILD) as existing beneficial uses. Because the REC-1 use includes fishing, it is unnecessary to designate these waterways with COMM. Further, the COMM use is not intended to capture subsistence fishing. It is intended to protect the commercial and sportfishing industries, which includes the abundance of fish as well as food safety of the fish in question. Fishing in the Delta has always been considered a recreational use.

Proposed Edit: Delete the proposed BPA to designate the Delta and Yolo Bypass waterways with the COMM beneficial use. At the very least, the footnote must be revised to indicate that COMM is a *potential* use and not an *existing* use.

Proposed Edit: Add on page BPA-9, add the underlined: “(e) whether methylmercury allocations and beneficial uses can be attained”.

Response: CVCWA comments that COMM should not be designated for the Delta or, at a minimum, that the designation specify that COMM is potential and not existing. The proposed BPA designates COMM as a beneficial use without specifying whether the beneficial use is existing or potential. While the currently designated beneficial uses of REC-1 and WILD adequately represent the need to protect the recreational consumption of fish from the Delta, COMM provides more clarity of the beneficial uses that the Delta Mercury Control Program is

designed to protect. The proposed designation of COMM will not prevent the re-evaluation of this beneficial use in the future nor the de-designation or any other modification of this use should the appropriate information be provided.

The commenter also states that when designating new beneficial uses, the State must determine if the use is attainable. This statement is incorrect. State laws require that the Central Valley Water Board consider beneficial uses when establishing water quality objectives (CWC section 13241(a)) and define beneficial uses as the uses that the State may protect against water quality degradation (CWC section 13050(f)). Federal laws specify that it is the national goal that wherever attainable, an interim goal of water quality which provides for the propagation of fish, shellfish, and wildlife and provides for recreation in and on the water (CWA section 101(a)(2)). Federal regulations require that a use attainability analysis be conducted when designating beneficial uses that do not include the uses specified in CWA section 101(a)(2) but federal regulations specifically do not require a use attainability analysis when designating uses that include those specified in CWA section 101(a)(2) [40 CFR section 131(j)(1) and 40 CFR 131(k)].

CVCWA Comment #5.

Remove the Long-Term Fish Consumption Goal

Page BPA-2 includes this statement: "The long-term goal of the mercury program is to enable people to safely eat four to five meals per week (128-160 g/day) of Delta fish. The Delta objectives protect people eating one meal/week (32 g/day) of trophic levels 3 and 4 Delta fish plus some non-Delta (commercial market) fish. The fish tissue objectives will be re-evaluated during the Phase 1 Delta Mercury Control Program Review and later program reviews to determine whether a higher consumption rate can be reasonably attained as methylmercury reduction actions are developed and implemented." The Central Valley Water Board should not be setting long-term goals in this BPA, especially if the current target is not being met and load reductions and results from the control studies have not been evaluated as to their feasibility and overall impacts to the Delta mercury loads.

Proposed Edits: The paragraph should be edited as follows: "~~The long term goal of the mercury program is to enable people to safely eat four to five meals per week (128-160 g/day) of Delta fish.~~The Delta objectives protect people eating one meal/week (32 g/day) of trophic levels 3 and 4 Delta fish plus some non-Delta (commercial market) fish. The fish tissue objectives will be re-evaluated during the Phase 1 Delta Mercury Control Program Review and later program reviews to determine whether proposed objectives protective for a higher consumption rate can be reasonably attained as methylmercury reduction actions are developed and implemented."

We appreciate this opportunity to provide input into the Basin Planning process and look forward to working with you and your staff to resolve our remaining concerns.

Response: The language for this long-term goal was developed during meetings in the Stakeholder Process. The intent was to recognize that there are people that eat Delta fish more frequently than one meal per week, which is the basis of the proposed fish tissue objectives. For current Delta fish consumption rates, please see the 1 April 2010 comment letter from Dr. Fraser Shilling. Because staff is unable at this time to definitively show that mercury concentrations to support eating 4-5 meals/week are attainable in the same fish species as those identified for the proposed water quality objectives (large trophic level 3 and 4 fish), staff omitted the long term goal from the Basin Plan amendments. The Basin Plan language still states that the fish tissue objectives will be reviewed at the end of Phase 1 and at during later program reviews to see whether objectives protective of a higher consumption rate can be

attained. Staff added a sentence to recognize that some people eat Delta fish more frequently than once/week.

CVCWA Comment #6.

Attachment A. Additional Comments

This attachment contains additional comments on and proposed edits to provide clarity in the BPA.

Compliance Schedule Provisions for NPDES Permit Holder

The BPA correctly provides the Central Valley Water Board with authority to include compliance schedules in NPDES permits for compliance with water quality-based effluent limitations based on the waste load allocations. However, the language as currently proposed is unclear as to the length of compliance schedules that may be adopted by the Central Valley Water Board.

Furthermore, CVCWA members continue to contend that Phase 2 should span 15 years, to the year 2035, which is equivalent to three five-year NPDES permit cycles, as originally contemplated when the BPA was introduced in 2004. Otherwise, this limits compliance to 10 years or less to achieve Phase 2 WLAs, which may not be enough time to design, build, and implement treatment systems for some dischargers.

Proposed Edit: Revise the compliance schedule language at BPA 3 as follows: “Beginning in Phase 2, the Regional Water Board shall, as necessary, include schedules of compliance in NPDES permits for compliance with water quality-based effluent limits based on the waste load allocations. The schedules of compliance shall be as short as possible, but shall not exceed the final compliance date of 2035, unless the final compliance date is extended by the Regional Water Board, and approved by U.S. EPA. If the final compliance date is extended beyond 2035, the Regional Water Board shall have the authority to extend schedules of compliance as necessary in accordance with the extended compliance date. The compliance schedules...”

Response: Staff is not recommending changing the 2030 compliance date. Staff has proposed that the compliance date be re-evaluated and modified as necessary during the Phase 1. Until the Phase 1 studies are complete, it is unknown if the 2030 date is unreasonable. For some sources, the compliance date could be modified to be sooner, while for other sources that demonstrate additional time is needed to come into compliance, the 2030 date could be extended. In the methylmercury program, a facility can start planning for implementing methylmercury requirements, such as obtaining funding if necessary, during Phase 1. If planning starts in Phase 1, facilities actually have more than 15 years until compliance is required. The Regional Board is committed to reviewing the feasibility of achieving allocations during the Program Review at the end of Phase 1. While the Board may adjust allocations as a result of the review, staff expects that facilities will have methylmercury allocations and that any planning that is started during Phase 1 will not be in vain. Staff removed the phrase “Beginning in Phase 2, “ from the text. Please see USEPA’s comment letter of April 2010 for the rationale for this change. Compliance schedules are necessary and allowable when a discharger cannot meet a new water quality standard. The BPA text indicates the compliance schedule will be included in permits as necessary for compliance with the allocations. Individual permits may include compliance schedules as necessary and will be approved by the Board and US EPA. Facilities have until the Basin Plan’s final compliance date, providing that other existing federal and state requirements are met.

The Regional Board can extend the compliance schedule with concurrence of the US EPA. The final compliance date for allocations to achieve the TMDL cannot be changed outside of an Basin Plan amendment. This is true regardless of whether the language is included in the amendment or not. There is no need to add this language to the Basin Plan. Staff did not modify the amendment.

CVCWA Comment #7.

Focus on a Holistic Approach

The Central Valley Water Board should focus on a holistic approach when evaluating the results of Phase 1 control studies and other activities. The Delta is an ever-evolving place in many respects. Many structural, ecological, and regulatory changes are being contemplated by a variety of agencies. The decisions to make or not make such changes may consider their effects on methylmercury production and transport.

Proposed Edit: Add text to the BPA indicating that the Central Valley Water Board will perform a complete linkage analysis as part of the Phase 1 review, linking mercury source loads in the Delta and its watershed to mercury concentrations in Delta fish.

Response: The Phase 1 Delta Mercury Control Program review will contain a re-evaluation of the linkage analysis between the objectives and sources (BPA-2), which is the linkage between the fish tissues objectives and the various sources of methylmercury, including methylmercury from the tributaries. In addition, staff will be completing the tributary TMDLs, which will identify methylmercury sources in the tributaries and evaluate linkages between those sources and future fish tissue objectives. The Phase 1 review will consider current conditions and proposed projects at the time of review, both in the Delta and upstream. The comprehensive review will look at mercury controls in the tributaries and Delta, and the review will include an assessment of whether methylmercury allocations can be attained (BPA-9).

CVCWA Comment #8.

USEPA Approval Process

The BPA indicates that USEPA will approve the Delta Mercury Control Program. Although USEPA must approve some parts of the BPA, USEPA does not have authority to approve all parts of the Delta Mercury Control Program. Because of their limited authority, we recommend that the language be amended as follows to clarify USEPA's approval authority.

Proposed Edits: Revise the text on page BPA-1 as follows: "This control program was adopted by the Regional Water Quality Control Board on [date], and approved by the U.S. Environmental Protection Agency approved the water quality standards portions of the Delta Mercury Control Program, including compliance schedule provisions for NPDES permit holders on [date]. The Effective Date of the Delta Mercury Control Program shall be [Effective Date], the date of U.S. EPA approval."

Response: The language was modified to read "The effective date of the Delta Mercury Control Program shall be [effective date], the date of USEPA approval. The effective date of the amendment will be EPA approval. The control program, which includes all changes to Basin Plan Chapter 4, is supposed to achieve the water quality objectives which are not in effect until

EPA approves them. Note that the Basin Plan amendments satisfy USEPA's requirements for a TMDL to eliminate the Delta mercury impairment. The USEPA must approve TMDLs.

CVCWA Comment #9.

Interim Limits for NPDES Wastewater Dischargers

Only POTWs are given interim wasteload allocations, given on page BPA-4: "During Phase 1, all facilities listed in Table B shall limit their discharges of inorganic (total) mercury to facility performance-based levels. The interim inorganic (total) mercury effluent mass limit is to be derived using current, representative data and shall not exceed the 99.9th percentile of a 12-month running average effluent inorganic (total) mercury load (lbs/year). The limit shall be assigned in permits as an annual load based on a calendar year. At the end of Phase 1, the interim inorganic (total) mercury mass limit will be re-evaluated and modified as appropriate."

Even in cases where considerable data have been gathered for estimating mercury loads, site-specific fluctuations beyond the facility's control could occur. In particular, recycling more wastewater in the future will lead to greater seasonal and inter-annual fluctuations in wastewater discharges to the Delta. While *overall* discharge volumes and mercury loads will be reduced, recycling will be limited at times by seasonal weather patterns or available water users. For example, if a seasonal discharger calculates its interim inorganic mercury load based on dry years' data and then discharges more in wet years, it will exceed its limit because of its early recycling efforts.

Proposed Edits: Revise the text on page BPA-4 as follows: "...The interim inorganic (total) mercury effluent mass limit is to be derived using current, representative data and shall not exceed the 99.9th percentile of ~~a~~ 12-month running ~~average~~ effluent inorganic (total) mercury loads (lbs/year). For intermittent dischargers, the interim inorganic (total) mercury effluent mass limit shall consider site-specific discharge conditions. The limit shall be assigned in permits as an annual load based on a calendar year..."

Response: The first statement in this comment is incorrect. Load and waste load allocations are assigned to all Delta and Yolo Bypass methylmercury dischargers, with the final compliance date of 2030. The interim mass caps assigned to POTWs are not methylmercury waste load allocations. The interim mass caps are based on inorganic mercury loading, and are limited to facility performance-based levels. The NPDES workgroup had numerous meetings to discuss the interim inorganic mercury limits, including provisions for seasonal dischargers. However the seasonal discharge text was inadvertently not included in the BPA text. Staff recommends adding the above text to recognize facilities that do not discharge year-round need to develop interim mass limits on a permit-specific basis. Staff also concurs with removing the word 'average' as this is unnecessary when determining the annual load based on the 12-month running load.

CVCWA Comment #10.

Control Study Deadline

A small change was made from the BPA language developed by the Stakeholder Group to the proposed BPA language, which changed or limited the intention of the language. The change made to the BPA implies that only the final deadline of a Control Study can be extended by the Executive officer. However, other interim deadlines in the sections should be eligible for extensions, if warranted. CVCWA recommends the language be returned to that discussed in the Stakeholder Group to allow flexibility with all deadlines on the Phase 1 Control Study.

Proposed Edits: On page BPA 8 make the following minor edit: "If the Executive Officer determines that dischargers are making significant progress towards developing, implementing and/or completing the Phase 1 Control Studies but that more time is needed to finish the studies, the Executive Officer may consider extending ~~the studies'~~ a study's deadlines."

Response: Staff concurs that the Control Studies' interim deadlines could be extended if the Executive Officer determines that significant progress was being made or if budget shortfalls delayed the start of the studies, and recommends the draft BPA text be modified as indicated in this comment.

CVCWA Comment #11.

Comments Specific to the Staff Report for Public Review

Based on a review of the Staff Report, specific comments and edits are provided below. Additional edits may be necessary to be consistent with edits to the BPA based on comments above.

Response: Staff will review the staff reports and make edits as needed to ensure consistency with the revised BPA.

CVCWA Comment #12.

On page 50 under heading Population growth, the last sentence reads "Even so, the relative bioavailability of mercury in point source discharges and atmospheric deposition remains unknown; it is conceivable that discharges from these sources could be more bioavailable than other nonpoint sources and therefore could have a disproportionate effect on ambient methylmercury if such sources were to increase." There is no scientific conclusion regarding the relative bioavailability of mercury from point sources versus other nonpoint sources. SRCSD's bioavailability study found that its point source discharge was no more bioavailable than ambient methylmercury.

Proposed Edits: Edit the sentence as follows: "Even so, the relative bioavailability of mercury in ~~point source discharges and atmospheric deposition~~ local methylmercury sources remains unknown; it is conceivable that discharges from ~~these~~ some sources could be more bioavailable than others, ~~which nonpoint sources and~~ therefore could have a disproportionate effect on ambient methylmercury if such sources were to increase."

Response: Staff modified the BPA Staff report to incorporate CVCWA's suggested edits.

CVCWA Comment #13.

Additional minor editorial corrections:

- The Yolo-Bypass (North & South) subareas are sometimes referred to as two distinct subareas, but are being regulated as one subarea. The BPA documents should be more consistent in this naming convention.

Response: Staff added a statement in the Staff Report (page 3) to clarify the Yolo Bypass North and South are sometimes referred to as two distinct areas, but the allocations and implementation plan apply to both sections as one subarea.

CVCWA Comment #14.

- P.iv: Figure 1 presents a methylmercury budget for the Delta with arrows in and out of the Delta box. Open water is considered as a source (sediment flux), but not as a sink (photodegradation and particle settling). Consequently, if water managers increase methylmercury losses in open water they would not be addressing their load allocations. Open water loads should be considered for their net effect.

Response: Figure 1 shows the sources and sinks to the Delta, not just net contribution from each category. The commenter is correct that open water habitats are a source (flux from the sediment) and a sink (photodegradation and particle settling from the water column) for methylmercury. The proposed allocations are assigned to sources, not sinks. All the sources – including sediment in open-water habitat – contribute to methylmercury in the water column of Delta waterways (a.k.a. open water habitat), not just flux from open-water habitat sediments. The sum of all the methylmercury sources needs to be reduced to reduce methylmercury in the water column and in fish. One way to reduce the effect of the sum of methylmercury source contributions could be to enhance loss processes (photodegradation and particle settling from the water column). However, if the open-water habitat allocation were to be “credited” with the current “sink” amount, allocations for other sources would need to be reduced by an equivalent amount to compensate, which would not be an equitable distribution of responsibility. Based on the 2003 and 2008 CalFed Delta methylmercury transport and cycling studies it is obvious that loss processes are important, which is why the draft Basin Plan amendments include requirements for state and federal agencies to evaluate their activities’ effects on ambient methylmercury concentrations in Delta open water areas and floodplain areas. Loss processes need to be maintained at their current levels (or, if possible, enhanced). If new water management or flood management activities caused methylmercury loss processes to decline (resulting in higher water column methylmercury concentrations), mitigation would be needed.

Board staff made a revision to the Requirements for State and Federal Agencies to more clearly specify that other agencies that are identified in Phase 1 that implement actions and activities that have the potential to contribute to methylmercury production and loss in open water will be required to take part in the studies. In the Phase 1 review, the Regional Water Board will modify, as appropriate, the list of entities that are responsible for meeting the open water allocation.

CVCWA Comment #15.

- P.26: The references to reductions in fish mercury concentration are all associated with water bodies contaminated by significant industrial sources that were removed. Yet even in those cases, mercury levels remain above fish contamination goals. That residual effect should be noted and considered when extrapolating those results to potential benefits of control actions in the Delta.

Response: To clarify, the full text in the report is as follows, with underlining added to highlight the text that addresses CVCWA's comment:

"Mercury concentrations in fish at contaminated sites decline after control measures are instituted to reduce incoming mercury loads (Table 3.2). Most sites studied to date are industrial facilities that discharge to fresh water and have operated for relatively short periods (one to two decades). The initial decrease in fish tissue concentration near the source of contamination is often fast with about a 50% decline in the first five to ten years. However, after a rapid initial decrease, concentrations tend to stabilize with little, if any, subsequent decline (Turner and Southworth, 1999; Takizawa, 2000; Lodenius, 1991; Lindestrom, 2001; Francesconi et al., 1997). The new equilibrium value is usually higher than in adjoining uncontaminated waterways and is also often greater than what is recommended as safe for human consumption (Turner and Southworth, 1999; Parks and Hamilton, 1987; Lodenius, 1991; Lindestrom, 2001; Francesconi et al., 1997; Becker and Bigham, 1995). The reasons are unclear but may be because small amounts of mercury are still entering from terrestrial sources (Turner and Southworth, 1999) or because of difficulties in bringing sediment concentrations down to background levels (Francesconi et al., 1997; Jernelov and Asell, 1975). If contamination has spread to areas more distant than the immediate facility, then reductions in fish tissue concentrations are much slower (Southworth et al., 2000). Absent from the literature are reports on remediation of pollution from mercury mining. The magnitude and duration of mercury and gold mining in California, coupled with the extensive distribution of contamination, will likely make recovery much slower than at industrial sites (Table 3.2)."

Millions of kilograms of mercury were released to waterways by historic mining in the Coastal Range and Sierra Nevada. Much remains in Central Valley channels (see Chapter 7 of the TMDL Report) and may be untreatable due to environmental and economic factors, thereby necessitating reliance on natural erosion as a reduction strategy. Natural erosional processes may take centuries to wash mercury-contaminated sediment that cannot be remediated from waterways.¹ As discussed in Section 4.2.1 (Consideration #2) in the draft Basin Plan Amendment Staff Report, this is one of the primary reasons that Board staff recommends a control program that focuses on reducing inorganic mercury sources (e.g., legacy² mercury sources in the Delta's tributary watersheds) and methylmercury sources in the Delta, Yolo Bypass, and tributary inputs. The proposed control program includes a requirement to reduce total mercury loads in tributary inputs to the Delta by a minimum of 110 kg/yr.

¹ See "Staff's Initial Responses to Board and Stakeholder Questions and Comments at the April 2008 Hearing" for additional discussion on this topic. The document is available in the Administrative Record and at the following Board website:
http://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/central_valley_projects/delta_hg/stakeholder_meetings/25nov08_hearing_rtc.pdf

² Board staff refers to mercury from historic mining operations in the Coast Ranges and Sierra Nevada that was released to Central Valley waterways by historic operations as well as by past and present erosion of excavated overburden and tailings as "legacy mercury".

CVCWA Comment #16.

- P.96 and elsewhere: The report references Bosworth et al. (2008). That report should be finalized and made public if it is to be part of the public record.

Response: The Board staff report, “A Review of Methylmercury and Total Mercury Discharges from NPDES Facilities in California’s Central Valley”, has received extensive review by SRCSD and other dischargers. An administrative draft report was sent in December 2008 to all of the NPDES facilities whose data were summarized in the draft report. Staff addressed comments submitted for the December 2008 draft report and made the revised draft report available for public review in May 2009. Staff incorporated corrections and comments on the December 2008 and May 2009 draft reports into the final version of the report, which was completed in March 2010. Comments submitted by SRCSD and other facilities and staff responses are provided in Appendix D of the final report. The final report is available at the Board website: http://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/central_valley_projects/delta_hg/other_technical_reports/

CVCWA Comment #17.

- P.172: The 4th of 5 bullet points should refer to a concentration of 0.05 ng/l rather than 0.5 ng/l.

Response: Staff made the correction, changing the text to 0.05 ng/l rather than 0.5 ng/l.

CVCWA Comment #18.

- P.199: The second paragraph refers to a report by TetraTech (2008). The report does not indicate that potential reductions to meet allocations may be possible. The focus was on tributary sources of total mercury. The analysis prioritized projects without quantifying net reductions associated with such projects.

Response: To clarify, the TMDL Staff Report text on page 199 states:

“The suite of potential total mercury reduction actions identified by the “Regional Mercury Load Reduction Evaluation, Central Valley, California”, completed by Tetra Tech EM Inc. under contract to the USEPA (Tetra Tech, 2008), and the review of reasonably foreseeable methods of compliance in Chapter 4 of the draft Basin Plan Amendment staff report, indicates that the potential reductions outlined in Table 8.5 may be possible. However, additional feasibility analyses and stakeholder input are needed in order to evaluate alternatives, funding sources, and potential environmental concerns associated with potential projects.”

This text includes a typographical error. The text should refer to Table 8.6 in the TMDL Report, “Preliminary Evaluation of Potential Watershed Total Mercury Load Reductions”. Board staff corrected the text to indicate “Table 8.6”. The purpose of the Tetra Tech evaluation was to identify potential mercury load control actions and candidate projects that could be undertaken to reduce the loading of total mercury to the Delta and ultimately the Bay. Tetra provided estimated project load reductions and comparative costs for each potential project area in Tables 6-2a through 6-3k. The Tetra Tech report and associated tables are available at the following website: http://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/central_valley_projects/delta_hg/other_technical_reports/regl_hg_study.pdf

CVCWA Comment #19.

Attachment B. Proposed Edits to Exposure Reduction Program Language

The language proposed in the March 1, 2010 separate release is shown in its entirety. CVCWA's recommended edits are shown as underline-strikeout changes. Comments are shown in italics.

Draft Delta Methylmercury Control Program Basin Plan Amendments, 1 March 2010
Exposure Reduction Program Section

The following is draft text for the Exposure Reduction Program section of the Basin Plan amendment. This text reflects discussions at the December 2009 and January 2010 Delta Methylmercury Stakeholder Group meetings, a workgroup meeting on 10 February 2010, a stakeholder meeting on 24 February 2010, and written comments. The following text replaces BPA text contained within the February 2010 staff report. For the full text of the proposed Basin Plan amendment, see the Central Valley Water Board's website:
http://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/central_valley_projects/delta_hg/april_2010_hg_tmdl_hearing/apr2010_propbpa_exec_summ.pdf

Exposure Reduction Program

While methylmercury and mercury source reductions **necessary to meet fish tissues objectives** are occurring, the Regional Water Board recognizes that activities need to be undertaken **with-to encourage** people who eat Delta fish to reduce their methylmercury exposure and **its** potential health risks. The Exposure Reduction Program is not intended to replace timely reduction of mercury and methylmercury **in-loads** to Delta waters.

The **Regional Central Valley** Water Board will investigate **waysactivities**, consistent with its regulatory authority, to address public health impacts of mercury in Delta fish, **including**. **The objective of such activities that would be to reduce actual and potential exposure of and mitigate consider health impacts to those people and communities most likely to be affected by mercury in Delta-caught fish, such as subsistence fishers and their families. → Consider deleting this paragraph. The next paragraph says what Board staff will do, and the subsequent text states the objective and strategy.**

By [one year after Effective Date], **Regional Water** Board staff shall work with dischargers, State and local public health agencies (**California Department of Public Health, the California Office of Environmental Health Hazard Assessment, and local county public health and/or environmental health departments**), and **other** stakeholders, including community-based organizations and Delta fish consumers, to complete an Exposure Reduction Strategy. The purposes of the **Sstrategy** will be to recommend to the Executive Officer **which-how** dischargers will be responsible for participating in an Exposure Reduction Program, **to set performance measures, and to propose a collaborative process for developing, funding and implementing the program-in a collaborative manner. At a minimum, point source dischargers and the state and federal agencyll** dischargers shall be responsible for conducting the Exposure Reduction Program **at a level proportional to each source's contribution to the impairment. In the absence of participation recommendations provided through the Exposure Reduction Strategyin the Exposure Reduction Program, methylmercury** dischargers shall be individually responsible for **implementing the Exposure Reduction Program-requirements.**

The objectives of the Exposure Reduction Program **are-is** to:

~~r~~ reduce ~~actual and potential~~ mercury exposure of Delta fish consumers most likely affected by mercury.

The Exposure Reduction Strategy should include elements that:

- ~~d~~Develop and implement ~~successful~~ community-driven ~~and regional~~ activities to reduce mercury exposure;
- ~~r~~Raise awareness of fish contamination issues among people and communities most likely affected by mercury in Delta-caught fish such as subsistence fishers and their families;
- ~~i~~Integrate community-based organizations that serve Delta fish consumers, Delta fish consumers, and public health agencies in the design and implementation of an exposure reduction program; and
- ~~i~~Identify resources, ~~as needed~~, for ~~public health agencies, dischargers, and~~ community-based organizations to participate in the Program.
- Utilize existing programs and materials or activities in place to reduce mercury.
- Develop measures of success that are agreed to by public health agencies and public and private stakeholders and that are found to be in the best interest of the public trust. Measures of success may include both scientific monitoring and public perception, which is measured through public surveys.

The dischargers, ~~either~~ individually or collectively, ~~or based on the Exposure Reduction Strategy~~, shall submit an exposure reduction workplan for Executive Officer approval by ~~two years after Effective Date~~. The workplan shall address the Exposure Reduction ~~Program objectives and dischargers' coordination with other stakeholders~~ Strategy. ~~→ The next deleted statement is redundant with the Strategy, and precludes what that Strategy would propose. Dischargers shall integrate or, at a minimum, provide good faith opportunities for integration of community based organizations and consumers of Delta fish into planning, decision making, and implementation of exposure reduction activities.~~

The dischargers shall implement the workplan by [four years after Effective Date]. Every three years after workplan implementation begins, the dischargers, individually or collectively, shall provide a progress report to the Executive Officer.

~~The California Department of Public Health, the California Office of Environmental Health Hazard Assessment, and the local county public health and/or environmental health departments should collaborate with dischargers and community members to develop and implement exposure reduction programs and provide guidance to dischargers and others that are conducting such activities. The California Department of Public Health and/or other appropriate agency should seek funds to contribute to the Exposure Reduction Program and to continue it beyond 2030, if needed, until fish tissue objectives are attained.~~

The State Water Board should develop a statewide policy that defines the authority and provides guidance for exposure reduction programs, including guidance on addressing public health impacts of mercury, activities that reduce actual and potential exposure ~~to mercury~~, and mitigating health impacts to those people and communities most likely to be affected by mercury ~~exposure from consuming Delta fish~~.

Response: Staff appreciates the suggested edits by CVCWA to clarify and refine the Exposure Reduction Program. Staff carefully considered these recommendations for revising the Exposure Reduction Program (ERP) section of the Delta methylmercury Basin Plan amendments as well as text change suggestions from other stakeholders. Based on the various comments received, staff modified portions of the Exposure Reduction Program in an attempt to

address the various concerns. The results of these edits are included in the Central Valley Water Board's agenda material and were posted on the Web Site prior to the Hearing.

Staff did not change the first paragraph because it is a general statement of the purpose of the ERP. Because text in paragraph 2 is directly from State Board Resolution 2005-0060, staff did not change it but added the reference. We added the recommended changes for the third paragraph, except for the clause, "in proportion to their contribution". Because there was insufficient time to fully develop the participation scheme during the stakeholder process, stakeholders generally agreed to create it as part of the Exposure Reduction Strategy. Staff expects that participation will take into account contribution to discharge (see BPA staff report 4.3.1). Staff revised the objective and elements of the program similar to above. Staff did not remove the requirement that the workplans describe stakeholder involvement because other stakeholders want assurance that they are involved in activities conducted by dischargers that are aimed at reducing exposure in their communities. The purpose of the Strategy is to describe the collaborative process for conducting the Program so it might not include the actual activities. The Program has a requirement for an exposure reduction workplan which will contain the elements of the program including all activities. Staff retained the paragraph about State Department of Public Health involvement. Staff believes that to be comprehensive, the ERP will likely need funding from the State as well as dischargers.

10. Joint Letter Regarding CEQA Evaluation of Cultural Resources

Letter Date: 1 April 2010

Corrina Gould, Chochenyo Ohlone for
Indian People Organizing for Change

Sherri Norris
California Indian Environmental Alliance

Irenia Quitiquit
Scotts Valley Band of Pomo Indians

Andria Ventura
Clean Water Action

Meyo Marrufo
Robinson Rancheria of Pomo Indians

Comments:

We the following submit the following test to amend the Draft Delta Methylmercury Basin Plan Amendment Chapter 7, the Environmental Evaluation and CEQA Checklist. Our changes and additions more explicitly reflect applicable California Environmental Quality Act (CEQA) language.

V. Cultural Resources

A historical resource is a resource listed in, or eligible for listing, in the California Register of Historical Resources. The California Register includes resources on the National Register of Historic Places, as well as California State Landmarks and Points of Historical Interest. Properties that meet the criteria for listing also include districts that reflect California's history and culture, or properties that represent an important period or work of an individual, or yield important historical information. Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts) or that have been identified as local historical resources are also included in the California Register (COHP, 2001).

An archeological site may be considered a historical resource if it is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California (PRC §5020.1(j)), or if it meets the criteria for listing on the California Register (14 CCR §4850). If an archeological site is not a historical resource, but meets the definition of a "unique archeological resource" as defined in PRC Section 21083.2, then it should be treated in accordance with the provisions of that section (COHP, 2001).

The California Office of Historic Preservation maintains an inventory called the California Historical Resources Information System (CHRIS), which includes California historical resources, places, and landmarks, and archeological sites. Information about California Indian historical sites can be accessed through Tribal Historic Preservation Officers, found throughout California, or by contacting the State Historic Preservation Officer with the Native American Heritage Commission; contact information is below. Information in the CHRIS inventory is accessed through eleven regional Information Centers. Names, contact information, and Delta counties for which each Information Center maintains the inventory are listed below. The Information Centers may charge fees for information about particular sites in a proposed project area. Information Centers that maintain records for Delta counties include:

- An updated listing of the The State Historic Preservation Officers can be obtained by the Native American Heritage Commission (<http://www.nahc.ca.gov/>)
- Northwest Information Center at Sonoma State University maintains records for Alameda, Contra Costa, Solano and Yolo County sites (www.sonoma.edu/nwic);
- North Central Information Center at California State University, Sacramento maintains records for Sacramento County sites (www.csus.edu/hist/centers/ncic); and
- Central California Information Center at California State University, Stanislaus maintains records for San Joaquin County sites (<http://www.csustan.edu/anthro/Pages/CentralCaliforniaInfoCenter.html>).

Areas or places of importance to Native Americans can be considered cultural resources and subject to consideration in the environmental review for site-specific project, even if not identified as a California Historical Resource. California Code of Regulations Title 14 Section 15064.5(a)(3) identifies criteria for determining an area or place to be significant in the “social” or “cultural annals” of California for the purposes of environmental review. Additional guidelines in identifying “traditional cultural properties” are provided by the U.S. Department of the Interior (Parker and King, 1998). A traditional cultural property is significant because of its association with the “cultural practices or beliefs of a living community that are rooted in that community’s history and are important in maintaining the continuing cultural identify of the community. Evidence of a traditional cultural property that is not listed in the National Register of Historic Places or in inventories above will be addressed by the CVRWB and/or the lead agency that performs the CEQA process on each individual project.

Compliance with the proposed Basin Plan amendments will entail a variety of construction activities to implement total mercury and methylmercury controls and management practices. To identify cultural resources, specific project sites must also be identified. However, because precise locations for projects are not known, as noted at the beginning of Section 7.2, each project must comply with the CEQA process including tribal consultation. Public Resources Code Section 21159 places the responsibility for project-level analysis on the entities that will implement site-specific actions to comply with the proposed Basin Plan amendments. The resources described above will help proponents of site-specific projects to identify cultural resources in a specific project area.

Even though specific projects sites are not yet identified, no significant adverse impacts to known cultural resources – historical resources, sites of archeological or paleontological significance, traditional cultural properties, or human burial sites – are expected as part of Phase 1 or Phase 2 of the proposed Project because construction activities are already required to adhere to CEQA and local ordinances to evaluate potential project sites for cultural resources through a search of historical records and databases (such as those described in the previous paragraphs) and published literature and to avoid substantial change or damage to identified resources. If potential impacts are identified, mitigation measures could include project redesign, such as the relocation of facilities outside the boundaries of archeological or historical sites. When avoidance is infeasible, by the entity completing

the project activities will follow Native American Heritage Commission's mandate for Native American Human Burials and Skeletal Remains, in partnership with affected tribe(s) which adequately provides for recovering scientifically consequential information from the site and deposits reports resulting from excavations with the California Historical Resources Regional Information Center (COHP, 2001). No impact is anticipated after mitigation.

It is possible that construction activities that involve excavation or other ground disturbances where disturbances have not previously occurred could uncover previously undiscovered cultural resources. However, it is expected that this would result in less-than-significant impacts because there are standard measures that could be implemented as part of the projects' designs to avoid or minimize impacts to newly discovered resources, many of which are required by AB 2641 (Protection for Native American Burials) and local policies and ordinances. Possible measures include:

- Require a professional trained to identify evidence of cultural resources to observe major excavation and earth-moving activities.
- If any archaeological, paleontological, or historical resources are discovered during construction activities, construction should stop within a 100-foot radius of the site, and a qualified archaeologist should be brought on site within 24 hours. If the find is determined to be significant, a full archaeological survey takes place. Construction activities in the area resumes once the survey is completed and all cultural resources are recovered.
- If any human remains are discovered during construction activities, no further excavation or other site disturbance takes place. The local coroner is notified and makes a determination as to whether the remains are of Native American origin, or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the coroner notifies the Native American Heritage Commission (NAHC) within 24 hours, the NAHC immediately notifies those persons believed to be the most likely descendant(s) (MLD) of the deceased, and once the NAHC identifies the most likely descendants, the descendants, with the permission of the landowner, inspects the site of the discovery make recommendation for the treatment or disposition of the remains and any associated grave items within 48 hours (per AB2641) of the MLD being granted access to the site. The landowner shall ensure that the immediate vicinity of the remains, established according to standard professional practices, is not damaged or disturbed by further activity until the landowner has conferred with the MLD. Discussion and consultation between the landowner and MLD should take into account the possibility of multiple burials and reasonable options regarding the MLD's preferences for treatment. If the NAHC is unable to identify an MLD, if the MLD fails to make a recommendation, or if the NAHC is unable to mediate a dispute concerning the appropriate disposition of the, the landowner shall re-inter the human remains and any associated items with appropriate dignity on the property in a location not subject to further subsurface disturbance, and to protect the remains from disturbance, the landowner must record the site with the NAHC or the appropriate Information Center, use an open space or conservation zoning designation or easement, and/or record a document with the county in which the property is located.

One possible type of traditional cultural property is a "riverscape", or river and its associated features, including water, wildlife, fish, and topography, that has significant cultural value (Gates, 2003). Waterways within the legal Delta boundary have not been formally identified as traditional cultural riverscapes. The intent of the proposed Basin Plan amendments is to reduce levels of mercury in fish

so that individuals can safely eat more Delta fish, including native fish species that may have been traditional resources from these rivers.

Thank you for your attention to this revised text. We look forward to working with the Board in future to ensure that while planning and implementing Exposure Reduction Strategies required in this BPA California Tribes will be consulted with according to federal and state mandates, and as afforded in CEQA.

Response: Staff appreciates these thorough recommendations for the Cultural Resources portion of the environmental evaluation, Chapter 7 of the Basin Plan Amendment Staff Report. Staff revised Chapter 7 using the above text. To the above text, staff made one minor change by adding a reference to California Senate Bill 18. SB 18 requires that local governments consult with tribes during local planning processes.

11. City of Roseville

Art O'Brien (Wastewater Utility Manager)
Letter Date: 31 March 2010

Comments:

Thank you for providing the opportunity to review and comment on the subject BPA and associated documents. The Central Valley Clean Water Agency (CVCWA) and the City of Roseville (City) have been active participants in the stakeholder process. The result of this process is a BPA that represents an adaptive approach to managing the methylmercury impairment in the Delta.

The City has reviewed the comments put forth by CVCWA on the BPA. The City fully supports the CVCWA comments outlined in their March 31, 2010 correspondence.

Response: This letter supports the March 2010 comments provided by CVCWA. Please see staff responses to the CVCWA letter.