



San Diego County Water Authority

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Public Comment
Beneficial Uses and Mercury Objectives
Deadline: 2/17/17 12 noon

February 17, 2017

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814



MEMBER AGENCIES

- Carlsbad Municipal Water District
- City of Del Mar
- City of Escondido
- City of National City
- City of Oceanside
- City of Poway
- City of San Diego
- Fallbrook Public Utility District
- Helix Water District
- Lakeside Water District
- Olivenhain Municipal Water District
- Otay Water District
- Padre Dam Municipal Water District
- Camp Pendleton Marine Corps Base
- Rainbow Municipal Water District
- Ramona Municipal Water District
- Rincon del Diablo Municipal Water District
- San Dieguito Water District
- Santa Fe Irrigation District
- South Bay Irrigation District
- Vallecitos Water District
- Valley Center Municipal Water District
- Vista Irrigation District
- Yuima Municipal Water District

OTHER REPRESENTATIVE

- County of San Diego

RE: Comment Letter -- Beneficial Uses and Mercury Objectives

Dear Chair Marcus and Members of the Board:

Thank you for the opportunity to provide comments on the draft Staff Report (Staff Report) and Substitute Environmental Documentation (SED) for the proposed amendment to the State Water Resources Control Board's (Board) Water Quality Control Plan for Inland Surface Waters, Enclosed Bays and Estuaries of California, Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions (Provisions). A significant amount of staff effort has gone into development of the Staff Report, which includes a wealth of scientific information on the problem of bioaccumulation of mercury in fish. We acknowledge that this is an important public health issue that is complex, and presents substantial cross-jurisdictional challenges to developing a solution. This letter and the attached table include our comments.

The Water Authority is the wholesale water supplier in San Diego County, providing water to 3.2 million residents together with 24 member agencies through a mix of local and imported water supplies. We are very interested in this subject because there are 24 surface water reservoirs in San Diego County, which were designed to support the region's water supply needs by capturing storm water runoff and/or storing imported water. Many of the local reservoirs region were constructed in the late 1800s and early 1900s to provide water for the San Diego region and have reliably served the local agencies in the region since that time. Recently the Water Authority expanded raw water storage capacity and improved local conveyance through our Emergency Storage Project. The local reservoirs are operated to maximize the use of local supply, offset dry-year shortfalls, and maintain emergency and carryover storage. The Water Authority's member agencies manage most of the region's reservoirs, and in coordination with the member agencies, the Water Authority manages the imported conveyance system. We also coordinate reservoir operations with the city of San Diego to optimize the use of storage and manage a pumped storage project. The primary purpose of the region's reservoirs is to provide water supply infrastructure, including raw water conveyance and storage.

In addition to providing water supply benefits, the region's reservoirs provide wildlife habitat, most agencies also support recreational fishing as a secondary use, though in many instances they are not required to do so. Fishing is managed by the member agencies in coordination with the California Department of Fish and Wildlife (DFW). In the interest of protecting public health, where fish tissue sampling has indicted mercury concentrations in excess of OEHHA's recommended levels, most reservoir operators in the San Diego region have proactively posted OEHHA's fish consumption advisories, which are also included in the State's Sport Fishing regulations booklets.

A number of these local reservoirs have been identified by the State Water Board for inclusion in the proposed Statewide mercury TMDL for drinking water reservoirs (Reservoir Policy) based upon data that requires additional validation and listing under 303(d) of the Clean Water Act (CWA) prior to the TMDL development. The Staff Report (Section 1.6) indicates that the Reservoir Policy is currently under development, but it has not been included as part of this proposed Water Quality Control Plan Update. Based on our review of your Staff Report, the primary source of mercury to the reservoirs in San Diego County is global atmospheric deposition. The Water Authority and our member agencies do not cause or contribute to mercury pollution in our local reservoirs and do not have a responsibility nor the ability to clean up this contamination. However, in the interest of supporting local fisheries and public health protection, we are willing to collaborate with the State and Regional Water Boards to minimize mercury impacts to the extent that it is practical and feasible and does not interfere with our or member agency reservoir operations that are focused on water supply or water rights. Collaboration should focus in the areas of informing the public, improving air quality, working collaboratively on fisheries management, and participating in pilot studies that may result in better science and innovative solutions.

While the Staff Report and SED include important information on the proposed beneficial uses, sources of mercury, pathways for bioaccumulation of mercury, human and wildlife exposure, and public health impacts, there remain a significant number of data and information gaps in all of these areas that requires further research and pilot programs. Furthermore, as previously noted, the Board is in the process of developing a Reservoir Policy, which is currently undefined and has not been adequately addressed in the SED or the Staff Report. Indeed, in some places the Staff Report implies that the Reservoir Policy may be superseded by the Provisions and at the same time suggests that it will proceed as an independent program. The lack of available scientific information is resulting in the inability of the State Water Board to propose a realistic solution, and the development of extremely stringent mercury standards that are unlikely to be attainable. As a result, the proposed Provisions will result in a significant number of waterbodies that are listed as impaired with no real possibility of achieving water quality objectives (WQOs) while at the same time potentially creating avoidable conflicts over in-stream flows and who bears responsibility for "clean up" of impairment that no water agency played a role in creating. Moreover, our member agency and dischargers may face stringent and costly requirements which are not likely to result in a measurable reduction in fish tissue mercury concentrations. If requirements associated with the beneficial uses, WQOs, or impaired water body listings

interfere with the primary purpose and use of the reservoirs which is to supply a safe and reliable water supply, this may drive the water agencies to restrict public access to agency owned local reservoirs, eliminating important beneficial uses such as fishing.

We request that the State Board take a measured and phased approach to establishing and defining the WQOs for mercury, while taking a proactive approach that can meaningfully address the mercury problem, which includes the following:

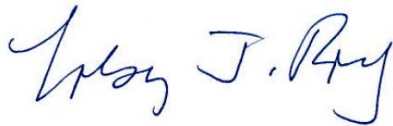
1. Adopt statewide narrative WQOs for tribal subsistence fishing and wildlife protection. Numeric WQOs should not be adopted until additional studies are conducted and site specific information is gathered. Both tribal subsistence fishing and subsistence fishing WQOs should be based on actual waterbody specific fishing patterns. For wildlife WQOs, additional bioaccumulation studies are needed to understand the relationship between water column concentrations and bioaccumulation in reservoirs, and mercury impacts to different wildlife species. Numeric WQOs could still be set locally by the Regional Water Boards based on site specific data.
2. Adopt a fish tissue methylmercury WQO of 0.3 mg/kg consistent with the EPA National Criterion with an intent to revisit that standard in five to ten years when more information is available. This WQO will protect both human health and wildlife.
3. Develop a comprehensive outreach plan to the public on fish consumption through collaboration with OEHHA, DFW, and reservoir owners and managers to ensure public health protection.
4. Incorporate mercury standards in discharge permits for the most significant contributors of mercury such as mines.
5. Collaborate with the California Air Resources Board to develop a proactive approach to reducing mercury contamination through air deposition.
6. Implement a research plan in collaboration with other state agencies, water suppliers and dischargers which includes pilot studies on mercury control approaches including but not limited to: fisheries management that minimizes the number of large sized trophic level 4 fish, reservoir management, beneficial construction and operation of wetlands, and minimization of further mercury pollution.
7. Provide additional objective criteria in the Provisions to guide the currently unrestricted designation actions of the Regional Boards with regard to future designation of beneficial uses and WQOs. Specifically, the Provisions should be

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amended to ensure the Board and future Regional Board designation decisions that:
(a) comply with Water Code Sections 13241, 13241 and 40 C.F.R., Section 131.3(e)
and (b) only designate new beneficial uses upon a showing that such uses currently
and actively exist in the watershed where the use is proposed.

Thank you for consideration of our comments. Please contact Lesley Dobalian with any
questions at (858) 522-6747.

Sincerely,

A handwritten signature in blue ink that reads "Toby Roy". The signature is written in a cursive style with a large initial 'T' and 'R'.

Toby Roy, Water Resources Manager

Sent via Electronic Mail to: commentletters@waterboards.ca.gov

Attachment: Table of Comments

San Diego County Water Authority
Comments on Proposed Mercury Provisions and Tribal and Subsistence Fishing Beneficial Uses

Topic	Issue or Concern	Comment
Beneficial Uses and WQOs	The Staff Report and Substitute Environmental Documentation (SED) does not provide an adequate analysis of potential impacts of adopting the proposed beneficial uses and water quality objectives (WQOs) on water rights and water supply. The tribal beneficial uses could potentially be based on any historical tribal use regardless of current conditions.	The SED should analyze potential direct and indirect impacts of designating the Tribal Tradition and Culture and Tribal Subsistence Fishing (T-SUB) beneficial uses on different waterbody types at a programmatic level. It should consider potential impacts to water supply and water rights that could result if historical practices are in a conflict with current water operations and infrastructure. It should also evaluate whether implementing the proposed WQOs will result in potential direct and indirect impacts to water supply and reservoir operations.
Tribal Subsistence Fishing WQO	The statewide numeric Tribal Subsistence Fishing WQO is based on fishing data primarily associated with tribes in northern California. The report used had limited data on tribal fishing patterns in southern California and no data from San Diego County.	Due to limited statewide data, the Tribal Subsistence Fishing WQO should be narrative rather than numeric, to support development of waterbody specific criteria based on actual fishing patterns. We support the statement contained in the SED on page 93 that states that EPA “strongly believes that States and authorized Tribes should develop criteria, on a site specific basis, that provide additional protection appropriate for highly exposed populations”. There is no evidence that the proposed numeric WQO is appropriate for San Diego, so it should not be established for statewide application.
Insignificant Discharge Exception	Water column thresholds are proposed to be implemented for municipal wastewater and industrial discharges. Provisions allow an exception for effluent limitations for insignificant discharges, at the discretion of the Regional Board.	Revise the SED to include examples of the types of discharges that may use this exception, such as for drinking water system discharges, non-potable recycled water use, potable reuse projects, and live stream discharges where there is no identified impairment.

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<p>Phased Approach and WQOs</p>	<p>The State Board's proposed Implementation Plan is unlikely to achieve the proposed WQOs, especially in reservoirs and lakes where the primary source of mercury is air deposition. The proposed mercury WQO for sport fishing of 0.2 mg/kg methylmercury in fish tissue will result in a significant increase in listings of impaired waterbodies with no reasonable ability to establish TMDLs to achieve this WQO in the foreseeable future. The EPA has established a National Criterion of 0.3 mg/kg to protect human health, which also provides wildlife protection.</p>	<p>WQOs should be established using a phased approach that relies on EPA's National Criterion of 0.3 mg/kg methylmercury. This approach will protect human health as well as wildlife.</p> <p>The SED identifies this option for establishing the sport fishing WQO to protect human health (Option 4 on page 96). The fish consumption rate associated with this criterion translates to a more readily achievable WQO and allows time for waterbody specific studies to establish accurate fish consumption patterns. The Regional Boards may adopt more stringent mercury WQOs for waterbodies if appropriate based on site specific data.</p> <p>A phased approach is also appropriate for the wildlife WQOs and Tribal Subsistence Fishing WQO, due to the considerable uncertainty associated with the proposed numeric WQOs. The EPA National Criterion will provide wildlife protection while studies are conducted to establish WQOs with more certainty. This option should be analyzed in the SED.</p> <p>The phased approach could also include a program to collaborate to reduce atmospheric deposition, reduce public health exposure and explore other pilot studies to reduce methylation or remove larger fish with higher mercury concentrations.</p>
<p>Nutrient Control</p>	<p>Higher nutrient loading to lakes and reservoirs increases anoxic conditions near the sediment-water interface that promotes mercury methylation and increases the potential for bioaccumulation in fish.</p>	<p>The SED should identify methods to control nutrient runoff from the watershed to reduce bioaccumulation. Reducing nutrient runoff from the watershed will also help prevent eutrophication.</p>

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Atmospheric Deposition	Global atmospheric deposition is the primary source of mercury in reservoirs in San Diego County. The proposed Implementation Plan will do little to address atmospheric deposition of mercury in reservoirs.	Implementation should include a commitment by the SWRCB to develop a plan to work with EPA and the California Air Resources Board to control mercury emissions from atmospheric deposition.
Public Health Exposure Reduction Program	The Staff Report does not provide a plan to protect public health through education and outreach.	Implementation should include a commitment by the SWRCB to work with the California Department of Fish and Wildlife, the Office of Health Hazard Assessment, and the Department of Public Health on a public health exposure reduction program. This program could also include the removal of larger fish with higher mercury concentrations from the waterbodies.
Constructed Wetlands	The proposed required design features to reduce methylation could be onerous for permitting wetlands. Constructed wetlands provide multiple benefits including treatment to improve water quality. Although the SED discusses the potential for wetlands to act as a sink for methylmercury, and for seasonal wetlands to general methylmercury, it provides minimal discussion on the potential benefits of constructed wetlands in removing mercury from the environment.	The Provisions should not create an unreasonable hurdle for permitting wetlands projects. The SED should include the benefits of constructed wetlands in improving water quality and removing mercury from the environment. The State Board should support and encourage additional research on the benefits of wetlands as it relates to methyl mercury and other toxic contaminants.
Dredging Projects	Dredging requirements could create an impediment to dredging reservoirs, which could be needed for management of water quality and reduced methylation in reservoirs.	The Provisions should not create an unreasonable hurdle for permitting dredging projects.
Reservoir Program	<p>The SED does not adequately address the proposed Reservoir Program because it has not been developed. The established WQOs have the potential to create future mandates associated with water supply reservoirs which are unknown at this time.</p> <p>Some of our member agencies have raised concerns about the age and validity of mercury data utilized for proposed</p>	<p>The SED is inadequate because it does not address impacts to reservoir operations and management that may result from any impaired waterbody listings or requirements intended to achieve WQOs. This information should be analyzed in the SED.</p> <p>The Provisions, and the SED should provide additional information on the future implementation of the Reservoir</p>

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	<p>impairment listings under the Board’s Reservoir Policy. Additionally, data used to make the proposed listings is from 2010 or earlier.</p> <p>Some of our member agencies are concerned that Regional Boards may, as part of Mercury Minimization Programs Imposed on Non-Point Sources of mercury pollution, seek to impose WDRs or WDR Waivers (as seemingly endorsed by Section IV.D.5 of the Provisions) by mandating costly BMPs that have the undesired effect of preventing runoff or tributary flows from entering a reservoir (thereby reducing local water supply).</p>	<p>Policy and whether the Reservoir Policy is superseded by the Provisions. Additionally, the Reservoir Policy (and/or the Provisions) should provide for a transparent and standardized policy for fish tissue sampling that ensures future 303(d) listings are premised upon current reservoir conditions.</p> <p>Under normal reservoir operations, we would like to be clear that reservoir operators are not dischargers. In addition, we ask that you revise the Provisions at Section IV.D.5 to clarify that the Regional Boards shall not impose requirements on dischargers that result in reduced flows into the reservoir or interfere with an agency’s water rights without the agreement of the water supplier.</p>
In Stream Flow and Fish Quantity Requirements	Absent direction to the contrary in the Staff Report and/or the Provisions, the proposed new beneficial uses are likely to result in the development of flow and fish quantity WQOs with the potential to frustrate current operation of reservoirs for water supply and the exercise of long established water rights. See, Staff Report at p. 110 (“The State Water Board may develop a flow objective if the flow objective is necessary for the reasonable protection of a beneficial use.”)	The Provisions should clarify that new beneficial uses and objectives should be implemented in a manner as to provide the least amount of interference with exercise of existing water rights and performance of reservoir operations.