

San Joaquin River Group



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March 22, 2012

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State Water Resources Control Board
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SUBJECT: Comment Letter-Statewide Mercury Policy – CEQA Scoping Comments

On March 5, 2012, the State Water Resources Control Board (State Water Board) and the Central Valley Regional Water Quality Control Board (Regional Water Board) staff held a CEQA Scoping Workshop for a Statewide Mercury Policy and Mercury Control Program for Reservoirs. The CEQA Scoping Notice for the Mercury Control Program for Reservoirs specifically named New Melones Reservoir, Tulloch Reservoir, Millerton Lake, McClure Reservoir, O'Neil Forebay, San Luis Reservoir, Modesto Reservoir, Turlock Lake, Woodard Reservoir, Don Pedro Lake, and Hetch Hetchy Reservoir as part of over 100 reservoirs in the Central Valley that will be the focus of this action. The San Joaquin River Group Authority (SJRGA) members derive all or a portion of their water supply and power generation from these facilities. The SJRGA recognizes the importance of the public health issue related to mercury and offers the following comments in response to the request of the State Water Board and the Central Valley Water Board.

1. Need to Document

The CEQA Scoping Notice for the Mercury Control Program for Reservoirs lists a number of potential implementation actions under consideration by the State and Regional Water Board staff. These include changes in reservoir management and operations that will modify water chemistry to reduce biologically available forms of mercury and changes in fishery management practices to limit populations of the types of stocked fish that often have high levels of mercury in their fish tissues. CEQA is suppose to be based on available scientific evidence and studies, not planned or suggested studies, theories or speculation. In the development of the CEQA document for this action, the State and Regional Water Boards need to document the scientific evidence available that shows that changes in reservoir operations or fishery management would be successful in reducing or mitigating levels of legacy methylmercury in reservoirs and/or its bioavailability. At present, the SJRGA knows of little or no information of how changes in reservoir operations would be successful and we would appreciate being kept informed on the development of this scientific background information and whether this information has been peer reviewed and/or field tested.

2. Changes in Reservoir Operations to Influence Water Chemistry in Reservoirs

The CEQA Scoping Notice for the Mercury Control Program for Reservoirs lists a number of potential implementation actions under consideration by the State and Regional Water Board staff for changing reservoir operations to influence water chemistry in reservoirs including:

- Water aeration and circulation to increase oxygen;
- Removal or capping of mercury-contaminated sediment in the reservoir and in upstream tributaries;

- Monitoring to identify areas within reservoir where mercury accumulates in sediment;
- Develop sediment management plans to reduce releases of mercury during reservoir maintenance;
- Modification of channel geometry to direct flows away from mercury-contaminated areas; and
- Where possible, modification of water storage and discharge patterns to reduce methylmercury production.

Each of these could have a significant impact on water supply, energy production and fishery resources, each of which would have a ripple effect on the farming industry and the local communities and their economies that depend upon this farming, many of which have the highest unemployment rates in the country. For all of the above potential actions or any alternative under consideration that utilizes changes in reservoir operations, the CEQA process should consider and fully evaluate as to whether that alternative would impact:

- Water supply deliveries for agricultural, municipal and wetland uses and the consequences in either the amount delivered, the timing of the deliveries or the quality of that water supply;
- Water rights and the subsequent water delivery capability of the various water right holders and reservoir operators;
- Repayment capacity for reservoir and downstream infrastructure debt and how these would change downstream operations and water supply delivery capabilities;
- Loss of agricultural crop production and/or fallowing of agricultural lands during various water year types;
- Changes in cropping patterns that would result from changes in surface water supply availability and the resulting economic impact;
- Conflicts with water supply carryover used to avoid drought year effects;
- Loss of wetland habitat in and near these reservoirs due to reservoir reoperations and changes in reservoir water levels;
- Conflicts with flood control needs and requirements and the resulting impacts on downstream communities;
- Consequences of likely increased groundwater use, including, but not limited to, overdraft to replace the lost agricultural, municipal and wetland water supplies caused by reservoir reoperations;
- Changes in groundwater quality likely to occur with increased overdraft to replace lost water supplies;
- Loss of domestic-use groundwater supplies in rural areas due to the resulting overdraft to replace water supplies lost due to reservoir reoperations;
- Increased power needs associated with increased groundwater pumping to replace water supplies lost due to reservoir reoperations;
- Loss of summer-time hydro-power energy production due to reservoir re-operations and changes in water head in the reservoirs;
- Consequences of increased carbon emissions from replacement energy supplies from decreased hydro-power operations;
- Increases in carbon emissions caused by increased power consumption during the summers months for groundwater pumping to replace water supplies lost due to reservoir reoperations;
- The costs and ability to transmit the increased power requirement caused by increased groundwater pumping and loss of hydropower production including impacts to the long-term reliability of the California energy grid;
- The long-term sustainability and costs of converting to groundwater pumping;
- Consequences of increased power needs for aeration of reservoirs;

- Conflicts with state’s existing energy and renewable energy policies;
- Cost and consequences of lost recreation opportunities on reservoirs created by changes in reservoir operations and the impact on the local communities that rely heavily on the recreational income for their revenue;
- Consequences to existing downstream water quality requirements due to reservoir reoperations;
- Consequences to existing downstream flow requirements including FERC licensing requirements;
- Conflicts with existing flow and temperature requirements for protection of anadromous fisheries, including salmon and steelhead;
- Potential for creating “dead pool” status in the reservoirs and the consequences to recreational opportunities, in-reservoir fishery resources and downstream fishery resources;
- The loss of fish habitat in the Delta in drier years due to changes in water supply availability;
- Impact of aeration facilities on water temperature in the reservoir and the conflict with existing flow and temperature requirements for protection of anadromous fisheries, including salmon and steelhead;
- Impact on public trust values to upstream river and reservoir habitat and commerce; and
- Reduced water supply for the Pacific Flyway and other wildlife refuges.

3. Impacts to Changes in In-stream Flow Requirements

The CEQA Scoping Notice for the Mercury Control Program for Reservoirs lists a number of potential implementation actions under consideration by the State and Regional Water Board staff for changing reservoir operations to influence water chemistry in reservoirs. It is unclear how changes in reservoir operations will be coordinated with and be consistent with the changes in the proposed flow requirements the State Water Board is considering under its present review of the Bay-Delta Plan. Any alternative being considered must evaluate whether it would impact or change the ability of the reservoir operator to meet the proposed State Water Board flow requirements during all water-year types and flow conditions and how this would impact salmon survival and out-migration downstream of the reservoir and in the Delta.

4. Changes in Fisheries Management in Reservoirs

The CEQA Scoping Notice for the Mercury Control Program for Reservoirs lists a number of potential implementation actions under consideration by the State and Regional Water Board staff for changing fisheries management in reservoirs to reduce exposure of the public to mercury levels in fish tissue. Two of the possible implementation actions listed are to “*Manage nutrients/algae to improve production (at the base of the food web) and reduce fish methylmercury concentrations*” and “*Promote abundance of species and sizes of reservoir fish that accumulate smaller amounts of mercury in their tissues*”. Both of these alternatives seem the most practical given the present state of knowledge and the potential cost of reservoir reoperation. During the CEQA review however, the State and Regional Water Board staff will need to assess:

- Whether increasing algae growth at the lower end of the food chain is compatible with the present State Water Board effort to develop biological objectives using specific reference streams for compliance;
- Whether using increased algae growth would cause downstream reaches to be in violation of biological objectives being developed by the State Water Board;
- Whether using nutrients to increase algae growth would cause increased nutrient or BOD loads to enter the South Delta and the Stockton Deep Water Ship Channel in conflict with efforts of all the water users to limit or eliminate these loads which were defined by the DO TMDL adopted by the Central Valley Regional Board;

- Whether increasing the algae growth at the lower end of the food chain would cause conflicts with municipal water supply quality and delivery requirements; and
- Whether suppression or removal of non-native or introduced species in the reservoirs could lower or reduce the exposure of the public to mercury levels in fish tissue.

5. Changes in In-stream Projects and Upland Earth Moving Projects

The CEQA Scoping Notice for the Mercury Control Program for Reservoirs lists a number of potential implementation actions under consideration by the State and Regional Water Board staff for changing in-stream projects and upland earth moving projects that disturb mercury contaminated soils or sediments. The SJRGA would support and encourage efforts to minimize these sources as these actions are known to reduce the mercury load to downstream reservoirs. This would eliminate the need for draconian efforts by reservoir operators to mitigate for these impacts using yet untested and expensive changes to reservoir operations. In looking at implementation actions or alternatives, the SJRGA would encourage the State and Regional Water Boards to include consideration of the continuation of the present moratorium on recreational suction dredging. The environmental documentation for this action clearly states that the impacts, both present and cumulative, are significant and unavoidable with the continuation of suction dredging in streams upstream of mercury impaired reservoirs and in the reservoirs themselves. The SJRGA recommends that the State and Regional Water Board staff consider the alternative of continuing the existing ban in the mercury-impaired Section 303(d) listed lakes and reservoirs in the San Joaquin River Basin. In addition, the SJRGA recommends that the State and Regional Water Boards also evaluate the alternative of continuing the existing ban on all upstream tributaries to the mercury-impaired Section 303(d) listed lakes and reservoirs in the San Joaquin River Basin. Dredging in these waters would likely release more mercury into these already impaired reservoirs as described in the Department of Fish and Game's environmental documentation.

We appreciate the opportunity to comment on the proposed CEQA Scoping. If you have any questions, please do not hesitate to contact us.



Dennis Westcot
Project Administrator

cc: SJRGA Managers
Pamela Creedon, Executive Officer, Central Valley Regional Board