

American River Watershed Mercury TMDL Stakeholder Meeting

Meeting Summary

Meeting Date: April 13, 2011 (9:30 am – 12:30 pm)

Location: Placer County Water Agency
144 Ferguson Road
Auburn, CA

Attendees: See attached.

Agenda Items:

- Welcome, Introductions, and Agenda Review
- Mercury reduction strategy, allocation strategy, and implementation program.
- Next Steps

Regional Board Staff welcomed everyone, reviewed the purpose of the meeting and meeting logistics, and led a round of introductions of meeting participants.

Patrick Morris (Central Valley Water Board) advised the group that the scope of the state-wide TMDL project has yet to be determined. Currently, Central Valley Water Board staff is continuing the independent development of the American River TMDL project as planned, though there is the potential to combine the American TMDL with the state-wide project.

Stephen Louie (Central Valley Water Board) gave a slide presentation that provided:

- Review of TMDL definition
- Mercury Reduction Strategy and scientific background
- Allocation strategy
- Implementation program

The PowerPoint presentation was shown in the meeting room and via web conference. The slide presentation is available on the web. Key topics discussed are summarized below.

TMDL and Basin Plan Amendment Process

Several water bodies in the American River watershed have been identified as not meeting the narrative water quality standards for the protection of human and wildlife consumption of fish due to elevated levels of mercury. As a result, the United States' Clean Water Act requires the State of California to develop a Total Maximum Daily Load (TMDL) estimate designed to attain water quality standards. A TMDL is also referred as the assimilative or loading capacity of a water body. This TMDL mercury control program will propose a numeric fish tissue target, to protect beneficial uses. The TMDL report is a technical document that describes the components necessary for a TMDL.

To establish a basis for a load reduction program, the numeric fish targets will be translated to aqueous methylmercury concentrations using bioaccumulation factors. These aqueous

methylmercury goals will be used to determine load reductions of sources of methylmercury to the American River watershed to protect the beneficial uses.

The Regional Board is required to establish Basin Plans which designate: beneficial uses, water quality objectives to protect beneficial uses, the program of implementation needed for achieving water quality objectives, and a monitoring and surveillance program. Regional Board staff will propose to amend the Basin Plan to add new numeric fish tissue target(s) for the American River watershed. In addition, the Basin Plan amendment will include an implementation plan (mercury control program) for controlling methyl and inorganic mercury sources. The Basin Plan Amendment Staff Report will describe the mercury control program specific to the American River watershed, include an evaluation of alternatives to address the impairment, include an evaluation of adverse environmental impacts of the program, and provide estimated costs of the program. The program will include independent scientific peer review and public review and input.

Regional Board staff plans to present the Basin Plan Amendment to the Regional Board in the Summer 2012. If adopted, the program will not become effective until US EPA approves the program, which this is estimated to be about a year after the Regional Board adopts the amendment.

Mercury Reduction Strategy

Due to the relationship between aqueous methylmercury and fish tissue methylmercury, Regional Board staff's strategy to lower fish tissue levels focuses on reducing aqueous methylmercury concentrations. Actions to reduce aqueous methylmercury concentrations include, but are not limited to: reducing methylmercury discharges, reducing methylation, and reducing concentrations of total mercury in the sediment. It is expected that improvements will be faster and greater if the focus is on both inorganic mercury and methylmercury reductions. The presentation gave examples of scientific evidence to support this strategy.

Allocation Strategy

Allocations are developed from the estimated assimilative capacity or TMDL of the watershed. All sources will be allocated an maximum load or concentration of methyl- and/or total mercury to meet the TMDL. It is estimated that a methylmercury reduction between 40-90%, depending on the human fish consumption rate, will be required by the total amount of sources to meet the TMDL. Non-point source allocations (in the form of methylmercury concentrations) could be assigned to 303d watersheds or source categories and not individual sources. Point source allocations will be either mass or concentration based. Allocations could be met by methylmercury and/or total mercury reductions. The allocations will incorporate an evaluation of background conditions.

Implementation Program

The implementation program is the mechanism to meet the TMDL or fish tissue target. The program will likely employ an adaptive management approach, where, as new information is developed, implementation actions and management plans can be revised. Mercury reductions will focus on controllable sources. The program will include long-term plans to meet allocations and targets, as well as, short-term actions for mercury source reductions. The implementation program will consider current mandates and regulations.

The slide presentation included a list potential responsible parties and possible implementation actions that they could (not must) perform to reduce mercury sources and/or reduce exposure to mercury to comply with the TMDL. The actions listed may not be applicable to all sources in the American River watershed, nor does the list contain all possible actions that could be performed.

Comments

1. With the large range of variability, how will the Regional Board determine if compliance is being met? How will we know if actions are helping? What will be the averaging periods to compare with goals/targets?
 - a. Compliance with goals/targets will likely be compared with annual average concentration or similar. The specific targets/goals and details of the monitoring and reporting program are still in development. The overall goal of this TMDL is to reduce fish tissue mercury concentrations to levels that protect the beneficial uses of the watershed. It will likely take many years of environmental mercury reductions before an effect can be measured in fish tissue concentrations.
2. How will the TMDL be enforced, for example many reservoirs are regulated by FERC licensing which renew every 40-50 years?
 - a. The Regional Board has various regulatory powers to implement the TMDL, for instance issuing 13267 Orders, Cleanup and Abatement Orders, and Waste Discharge Requirements. The regulatory tools to implement the TMDL will likely vary depending on source types, location, agency, etc. The Lake Oroville FERC license permit contains a permit opener, if it is determined that the reservoir may be contributing to a methylmercury problem.
3. Stakeholders asked how this TMDL will address possible suction dredging impacts in the American River watershed.
 - a. The Department of Fish and Game (DFG) currently regulates the permits for suction dredging, and the DFG has extended the comment period for the environmental assessment of the suction dredging permit regulation. The Straw Proposal could contain a placeholder for suction dredging, and stakeholders could help determine how, or if, suction dredging would be part of the TMDL. Suction dredging is a State-wide issue. The State Board may be the lead agency to determine any adverse impacts or benefits of suction dredging or develop any regulations or requirements to protect water quality as a result of suction dredging.
4. Some of the requirements of this TMDL might conflict with other regulations that are required by some, for example, providing pulse flows for sediment transport or flow for recreational rafting.
 - a. The TMDL staff report will recognize current regulations and mandates. Because the Regional Board will not prescribe actions that are required to meet allocations, responsible parties have the opportunity to develop or choose control actions specific to their situation.
5. Some of the possible implementation actions listed will not reduce mercury to the American River watershed (fisheries management, conduct studies, etc.) or downstream.
 - a. It will take many years for mercury reductions to have an effect on lowering fish tissue mercury levels. The proposed implementation program will likely include short-term actions that could reduce immediate exposure from fish mercury while load reductions are occurring.

Next Steps:

- Cancellation of May 18th Meeting
- Scheduling of a CEQA Scoping Meeting in July 2011
- Revision of the Straw Proposal to include upstream actions. This will be sent to the group a few weeks before the next meeting.

**American River Watershed Mercury TMDL
Stakeholder Meeting
April 13, 2011**

Attendees

Stephen Louie, Central Valley Water Board
Gene Lee, USBR
Carrie Monohan, The Sierra Fund
Marie Davis, PCWA
Carol Kennedy, Tahoe National Forest
Stephen McCord,* Larry Walker Associates
Michael Garabedian, Friends of the North Fork
Steve Tyler, Self
Rick Eddy, Self
Ben Ransom, PCWA
Patrick Morris, Central Valley Water Board
Dan Corcoran,* EID
Drea Traeumer,* EM Hydrology
Diane Fleck,* U.S. Environmental Protection Agency
Leslie Case,* CALTRANS
Justin Wood,* Friends of Deer Creek
Rex Bell,* PG&E
Tom Maurer,* USFWS
Mark Fowler , Placer County Fish and Game
Kim Morales, El Dorado National Forest
Barry Hill,* Tahoe National Forest
Sherri Norris,* CIEA
Ruth Chemerys,* U.S. Environmental Protection Agency
Bill Christner, ECORP
Darold Perry, SMUD
James Robert Lee, Jr., Self
Kendra Zamzon, Self
Peter Graves, US BLM

* People who attended by Webinar/conference call.