

STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

STAFF SUMMARY REPORT (Jill Marshall)
MEETING DATE: October 11, 2006

- ITEM: 12
- SUBJECT: Proposed Amendment to the Water Quality Control Plan (Basin Plan) for the San Francisco Bay Region to Establish New Water Quality Objectives and a Total Maximum Daily Load (TMDL) and Implementation Plan for Mercury in the Walker Creek Watershed - Hearing to Consider Proposed Basin Plan Amendment
- CHRONOLOGY: August 2006 – Public Notice of Proposed Basin Plan Amendment
- DISCUSSION: This is the first of two hearings on a Basin Plan amendment to establish mercury water quality objectives and a TMDL and implementation plan to reduce and control the discharge of mercury in the Walker Creek watershed. Walker Creek runs through fairly steep terrain in West Marin County, and drains to Tomales Bay. The watershed contains four inactive mercury mines and the Soulejule Reservoir, popular with local sport fishermen.
- The proposed amendment and supporting staff report (Appendices A and B) were available for public comment for 45 days. This hearing provides an opportunity for stakeholders to communicate their interests and concerns with the TMDL to the Board, and for Board members to ask questions of staff and stakeholders. The second hearing is currently scheduled for the December 2006 Board meeting. By then, we will have prepared responses to all written comments and the comments presented at this first hearing, and revised the proposed Basin Plan amendment and staff report as appropriate. The Board will then be able to both consider the comments and responses and to establish the water quality objectives, TMDL and implementation plan by adopting the proposed Basin Plan amendment.
- We have been evaluating mercury concentrations in this watershed since the mid 1980s. With local groups and U.S. EPA, we have completed a very successful remediation project at the Gambonini Mine, the largest contemporary source of mercury in the watershed. The proposed Basin Plan amendment is a product of over a decade of field studies, analysis, and such early implementation actions.
- Mercury occurs naturally in deposits throughout California's coast ranges. In the 1960s and 1970s, there were four active mercury mines in the Walker Creek watershed, as well as a mercury processing facility at Gambonini, the largest of the four. Two of these mines are located in or near the shoreline of Soulejule Reservoir, the other two mines drain to Walker Creek tributaries. During the record storms of 1982, mining waste from the Gambonini Mine site flooded downstream channels and filled the floodplains of Salmon and Walker creeks with mercury-laden sediments. When we began evaluating the site a few years later, the Gambonini Mine site still contained over 300,000 cubic meters of erodable mining waste, while hundreds to thousands of kilograms of mercury were continuing to be discharged to downstream waters.
- Mercury has adversely impacted aquatic life and wildlife (specifically fish-eating birds) throughout the watershed and in Soulejule Reservoir; recreational uses of

the reservoir are impaired due to elevated mercury levels in local fish sought by anglers. The good news for this watershed is that cleanup efforts at the Gambonini Mine site have significantly reduced mercury loading downstream. However, studies by our staff and the Marin Resource Conservation District show that mercury deposits remain downstream in some incised canyon sections of the creek as well as in floodplains and in-stream sediments. In addition, there is the potential for continued mercury loading from the two abandoned mines in the Soulejule Reservoir watershed.

The proposed Basin Plan amendment would establish the following for the freshwater portion of Walker Creek, its tributaries and Soulejule Reservoir:

- Two new mercury water quality objectives to protect wildlife
- Concentration targets for mercury in stream sediments and reservoir water
- A concentration-based TMDL for mercury in Walker Creek
- Allocations for all significant sources of mercury-laden sediment or methylmercury in the watershed
- An implementation plan building on previous and current efforts to minimize mercury discharges and restore healthy stream corridors in the watershed
- A plan and schedule for evaluating and monitoring progress towards meeting the targets.

We received two comment letters (Appendix C) regarding the proposed Basin Plan amendment and staff report from U.S. EPA and the Marin Municipal Water District. This limited response reflects broad community support for our efforts to reduce mercury discharges to Walker Creek and to restore beneficial uses.

U.S. EPA supports the proposed wildlife fish tissue objectives. However, it presents a number of constructive comments and suggested changes to assure the TMDL addresses all applicable water quality standards. We are meeting with U.S. EPA to discuss ways to resolve its concerns.

The Marin Municipal Water District supports the proposed implementation measures for Walker Creek, downstream of the reservoir, and is willing to consider augmenting monitoring efforts for mercury levels in water and fish in Soulejule Reservoir. However, it questions whether there are inactive mines in need of remediation in the Soulejule Reservoir watershed. We will tour the reservoir area with District staff in the next month and evaluate remediation needs and options.

RECOMMEN-
DATION

No action is necessary at this time.

APPENDICES

- A. Proposed Basin Plan Amendment
- B. Supporting Staff Report
- C. Comment Letters