

**STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

STAFF REPORT FOR REGULAR MEETING MARCH 19, 2004

Prepared on February 25, 2004

ITEM: 20

**SUBJECT: ADOPTING THE CLEAR CREEK AND HERNANDEZ RESERVOIR
TOTAL MAXIMUM DAILY LOAD FOR MERCURY AND
IMPLEMENTATION PLAN**

BACKGROUND

Clear Creek and Hernandez Reservoir are listed for mercury impairment on the 2002 Clean Water Act Section 303(d) list. Section 303(d) requires the Regional Board to adopt a Total Maximum Daily Load (TMDL) for listed waterbodies. Staff recommends the adoption of a TMDL and implementation plan for mercury in Clear Creek and Hernandez Reservoir. Staff evaluated available water quality data for mercury and determined a maximum annual load for mercury to protect beneficial uses, numeric targets that indicate load reduction, and an implementation plan to achieve these targets.

The TMDL report addresses water quality impacts from mercury within the watershed, establishes numeric targets for water and fish tissue, calculates mercury loading and allocates necessary reductions in total loading, and identifies implementation actions that are expected to bring about load reductions and attainment of the numeric targets. Resolution RB3-2004-0029, Attachment A, will constitute the Regional Board's approval of the TMDL and endorsement of the Implementation Plan. The Technical Analysis report describing the TMDL is available in Attachment B.

DISCUSSION

DESCRIPTION OF CLEAR CREEK AND HERNANDEZ RESERVOIR

The Clear Creek watershed encompasses approximately 14 square miles located in San Benito County. Clear Creek flows into the San Benito River, which is impounded to make

Hernandez Reservoir a little less than one mile downstream of the Clear Creek confluence. Upper areas of the Clear Creek watershed form the eastern watershed boundary of the Central Coast Region. These areas contain a number of inactive mines that were involved in mercury production.

PROBLEM

Available data show exceedence of the Basin Plan total mercury objective (0.05 µg/L for municipal and domestic supply [MUN] beneficial use based on California Toxics Rule) in samples from Clear Creek in 1996 - 2000. In addition, fish tissue samples collected from fish in Hernandez Reservoir in 1995-96 exceeded US Food and Drug Administration standards for human consumption (less than 1 mg/kg total mercury in fish tissue), which is an impairment of the Commercial and Sport Fishing beneficial use. Impairment of the Commercial and Sport Fishing beneficial use by mercury transported or deposited as sediment is an exceedence of Basin Plan narrative objectives for suspended and settleable solids.

NUMERIC TARGETS

The TMDL report evaluates the mercury-related water quality problems that exist in Hernandez Reservoir and the Clear Creek watershed. The document identifies suitable targets for water-column mercury in Clear Creek and methylmercury in fish tissue in Hernandez Reservoir. The water column targets are 0.05 ug/L total mercury in water (based on California Toxics Rule as applicable to the municipal supply beneficial use). The fish tissue methylmercury target is no more

than 0.3 mg mercury/kg tissue, which is a recommended water quality criterion proposed by USEPA in 2001.

TMDL CALCULATION

Because the available data on flows in Clear Creek and discharge from Hernandez Reservoir are available on a monthly basis, a seasonal load allocation was developed. Although the TMDLs are actually calculated on a seasonal basis, the term "Total Maximum Daily Load" is used for consistency with the Clean Water Act.¹

Using the available flow data and the water column targets, a seasonally adjusted total maximum daily mercury load was derived for Clear Creek.

The Total Maximum Annual Mercury Load for the Clear Creek drainage area is:

44 grams (1/1-3/31)
 + **24 grams** (4/1 – 6/30)
 + **6 grams** (7/1- 9/30)
 + **5 grams** (10/1-12/31)
79 grams/yr
 (annual average total load from drainage area)

Based on outflows from the reservoir, the Total Maximum Annual Mercury Load for the Hernandez Reservoir is:

112 grams (1/1-3/31)
 + **84 grams** (4/1 – 6/30)
 + **116 grams** (7/1- 9/30)
 + **26 grams** (10/1-12/31)
338 grams/yr
 (annual average total load from drainage area)

PUBLIC INVOLVEMENT

Regional Board Staff has conducted TMDL outreach by coordinating the TMDL with the US Bureau of Land Management, the San Benito County Water District, and local residents in the vicinity of Clear Creek. In addition, public review and comment through this board hearing process provides another formal opportunity for public input for

adoption of this TMDL. Notice of public hearing was given by notifying newspapers of general circulation within the Region and by mailing a copy of the notice to all persons requesting such notice and affected government agencies.

IMPLEMENTATION

The overall intent of the Implementation Plan is to reduce mercury-rich sediment loading into Clear Creek and therefore the downstream Hernandez Reservoir. The Implementation Plan consists of endorsing activities of another agency, the US Bureau of Land Management.

Because the mercury load of Clear Creek is derived primarily from historic mining operations in the area, the Implementation Plan describes the control of these identifiable sources. The Plan identifies specific actions that have been conducted by the US Bureau of Land Management (BLM) which are expected to bring about the reductions in mercury loads specified in the TMDL.

MONITORING

The monitoring plan describes the way in which the Regional Board will ensure attainment of the TMDL. The Regional Board will make use of the existing monitoring program of the US Bureau of Land Management (USBLM). The USBLM currently monitors Clear Creek near its confluence with the San Benito River.

In addition to the USBLM monitoring in Clear Creek, staff proposes future Regional Board monitoring of fish tissue from Hernandez Reservoir to demonstrate that beneficial uses are protected in the reservoir.

The technical support documentation for this proposed Board action is available at the Region 3 website at <http://www.swrcb.ca.gov/rwqcb3/TMDL/PublicCommentParticipation.htm>. Staff did not include the entire document in the staff report in order to save paper. Paper copies are available upon request.

¹ Total maximum "daily" loads can be expressed as mass-per-time (40 CFR 130.2(i)), i.e., on a basis other than daily.

CALIFORNIA ENVIRONMENTAL
QUALITY ACT

This Board resolution certifies that an existing project makes any further regulatory action (i.e., any "project") unnecessary. Therefore, this action is not a "project" that requires compliance with the California Environmental Quality Act (California Public Resources Code §21000 et seq.). The Regional Board is not directly undertaking an activity, funding an activity or issuing a permit or other entitlement for use (Public Resources Code section 21065; 14 Cal. Code of Regs. §15378). USBLM is not required to obtain Regional Board approval to continue its remediation plan. The Regional Board is not approving any activity; it is merely certifying that an ongoing activity also satisfies other legislative requirements.

ANTI-DEGRADATION

This resolution does not allow degradation or lower water quality, and does not approve an activity that produces or may produce a waste or increased volume or concentration of waste or an activity that discharges or proposes to discharge to existing high quality waters. This resolution therefore complies with Resolution 68-16 and 40 CFR §131.12.

COMMENTS

Notice of this item being proposed to the Regional Board was distributed to a list of interested parties and agencies that have indicated interest in the Clear Creek area or have indicated interest in TMDL activities in the vicinity of the Clear Creek and Hernandez Reservoir sites. These interested parties include:

Mr. Keith Anderson, California Army National Guard
Mr. Michael Cahn, UC Cooperative Extension
Mr. Robert Curry, Environmental Studies
Mr. Greg Frantz, SWRCB
Emily Hanson, Monterey County RCD
Mr. Don Klusman, Natural Resource Consultant
Mr. Michael Levy, SWRCB
Ms. Cheryl McGovern, USEPA-9

Ms. Connie Rutherford, US Fish and Wildlife Service
Mr. Jon Bishop, LA-RWQCB
Ms. Karen Christensen, Santa Cruz County
Dr. Andrew DeVogelaere, Monterey Bay National Marine Sanctuary
Mr. John Gregg, San Benito County Water Management District
Ms. Pamela Heatherington, ECOSLO
Mr. Lowell Landowski, CA Dept. of Parks and Recreation
Ms. Dawn Mathes, Coalition of CCCFB
Mr. Tim Moore, US Bureau of Land Management
Mr. John Steinbeck, Tenera, Inc.
Mr. Ray Bransfield, US Fish and Wildlife Service
Mr. Eugene Cunningham, Citizen
Ms. Mary Ellen Dick, San Benito/Santa Clara County Farm Bureau
Ms. Nancy Griffin, San Benito County
Mr. Joe Karkoski, Central Valley RWQCB
Mr. Rick LeFlore, CA Department of Parks and Recreation
Ms. Mary Ann Matthews, California Native Plant Society
Mr. Jeff Rodriguez, Central Coast Resource Cons. and Develop.
Mr. Allen Stroh, Monterey County Environmental Health
Terry Palmisano, CA Department of Fish and Game
Ms. Kathy Thomasberg, Monterey County
Ms. Linda Vida, UC-Berkeley
Mr. Ed Tobin, Salinas Ramblers Motorcycle Club
Mr. Craig J Wilson, SWRCB
Ms. Ling Tseng, SWRCB

Written comments (via mail, e-mail, and fax) concerning the proposed TMDL for Mercury in Clear Creek and Hernandez Reservoir received prior to the Regional Board meeting will be considered prior to Board approval.

RECOMMENDATION

Adopt Resolution R3-2004-0029 approving the TMDL for Mercury in Clear Creek and Hernandez Reservoir, certifying the implementation plan of the USBLM will achieve the TMDL.

ATTACHMENTS:

- A. Resolution R3-2004-0029
- B. Technical Support Document- available at the Region Three website at <http://www.swrcb.ca.gov/rwqcb3/TMDL/PublicCommentParticipation.htm>

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