

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

STAFF REPORT FOR REGULAR MEETING DECEMBER 3, 2004

Prepared on November 8, 2004

ITEM: 30

**SUBJECT: STATUS OF TRACKING AND MONITORING THE SAN LORENZO RIVER
SEDIMENT TOTAL MAXIMUM DAILY LOAD**

BACKGROUND

On May 16, 2003, the Regional Board adopted Resolution No. R3-2002-0063 (Attachment A available on-line) the San Lorenzo River (including Carbonera Creek, Lompico Creek, and Shingle Mill Creek) Sediment Total Maximum Daily Load (TMDL) Basin Plan Amendment. The TMDL became effective on December 18, 2003 when it was approved as a Basin Plan amendment by the Office of Administrative Law. Regional Board staff are currently tracking year one of implementation. Tracking and monitoring of the San Lorenzo River Siltation TMDL consists of the following aspects:

1. Implementation Tracking
2. Numeric Target Monitoring
3. Comprehensive Monitoring

Regional Board staff conducted telephone interviews during August and September 2004 and held a meeting with numerous TMDL implementing parties on October 7, 2004. The purpose of the interviews and meeting were to: 1) review the TMDL strategy; 2) determine time schedules for implementation actions; 3) gather information on implementation progress; and 4) discuss monitoring to determine TMDL progress and achievement. Staff plans to meet with the San Lorenzo River Technical Advisory Committee, a stakeholder group identified in the TMDL as collaborators in evaluating TMDL implementation and monitoring, in January 2005.

This staff report describes the progress towards tracking and monitoring implementation during year one of TMDL adoption.

IMPLEMENTATION TRACKING

The Trackable Implementation Actions Table (Pages 13 and 14 of Resolution R3-2002-0063 are included in Attachment B) illustrates implementation actions that will address the problem of sediment control in the San Lorenzo River watershed. Implementation tracking determines whether or not the identified management actions are undertaken. Regional Board staff believe that implementing the actions, and tracking their progress should be the primary focus to protect water quality and the associated beneficial uses.

The TMDL requires that Regional Board staff review implementation progress annually. In anticipation of the end of year-one deadline, Regional Board staff evaluated the status of each of the actions in the TMDL implementation plan (e.g. road related erosion assessments, implementation of road management practices and manure management grants) during phone surveys and interviews in August and September. Then, in October 2004, Regional Board staff presented the status information on these actions to agencies identified as implementing parties. The results of the survey and the meeting indicate that implementing parties have made significant progress on implementing the actions and have made a commitment to continue to pursue implementation. Attachment C illustrates the status of each of the implementation actions at this early phase of implementation. Staff will be working with each of the implementing parties in the upcoming months to further define milestones and time schedules for each action. Staff will develop a reporting format that will be used for evaluating progress towards TMDL attainment. Implementing parties will use this format to report to us every three years. The San Lorenzo River

Technical Advisory Committee will review the reporting format in order to solidify the process and structure for the year-three evaluation.

NUMERIC TARGETS

The TMDL obligates Regional Board staff to monitor numeric targets triennially to determine if and when beneficial uses (COLD, FRESH, MIGR, SPWN) are being protected. The four numeric targets (Page 7 of Resolution R3-2002-0063) are included in Attachment D. Currently no funding is available for monitoring; however, staff will pursue funding and resources (e.g. through the Central Coast Ambient Monitoring Program and/or collaborative efforts) to monitor the numeric targets to satisfy TMDL requirements. The anticipated triennial cost of such monitoring ranges from \$33,000 to \$54,000 depending on the number of sites and staff.

COMPREHENSIVE MONITORING

The TMDL identifies the need to evaluate the numeric target data in the context of other monitoring efforts, as part of a Comprehensive Monitoring Plan. The TMDL calls for the Comprehensive Monitoring Plan to be developed during year-one of implementation and to include the following components: 1) streambed and habitat monitoring (including the numeric targets); 2) turbidity monitoring; and 3) project effectiveness monitoring.

Two proposed monitoring plans, including the San Lorenzo River Salmonid Enhancement Plan and the County of Santa Cruz Monitoring Plan, were identified in the TMDL as potentially providing additional streambed and habitat monitoring. These two plans, however, are not currently funded and future funding is not anticipated.

Efforts to monitor coho salmon and steelhead populations are occurring in the San Lorenzo River and other waterbodies within the Big Basin Hydrologic Unit area. The City of Santa Cruz is conducting Endangered Species Act-related monitoring to determine the limiting factors affecting cold-water fisheries and how they are affected by water diversion. This monitoring is occurring in the San Lorenzo River (primarily Newell Creek), Majors, Liddell, and Laguna Creeks, also within the Big Basin Hydrologic Unit area. The National Oceanic and Atmospheric Administration, Fisheries is currently conducting

studies on basic life history traits of coho salmon and steelhead in Scott Creek, a waterbody within northern Santa Cruz County, to determine how these traits might be affected by artificial propagation and environmental conditions.

In addition to fisheries monitoring, the City of Santa Cruz monitors turbidity continuously to provide information as to whether or not the municipal and domestic water supply (MUN) beneficial use is being protected.

Project effectiveness monitoring is used to assess whether specific erosion control projects or management practices have had the desired effect. All federal and state funding for watershed improvement projects, including 319(h), State Revolving Fund projects, and Propositions 13, 40, and 50 require that the benefits and effectiveness of each project be assessed by the project proponent. Similar requirements are attached to the Department of Fish and Game grant programs.

While these monitoring efforts are not specifically intended to characterize beneficial use protection in the San Lorenzo River related to sediment control, they do satisfy other agencies' regulatory requirements, which have overlapping objectives with those of the Regional Board. Every three years, Regional Board staff will review the results of these efforts in conjunction with the numeric target data collected in the San Lorenzo River to assess protection of aquatic life.

Regional Board staff and others have committed to numeric target, fisheries, turbidity, and project effectiveness monitoring. These monitoring efforts will inform an adaptive approach and we do not recommend at this time establishing watershed-scale monitoring beyond the proposed numeric target monitoring. These monitoring efforts will inform an adaptive approach. Staff will continue to coordinate with implementing parties and entities involved in monitoring in the Big Basin Hydrologic Unit area, along with the San Lorenzo River Technical Advisory Committee in order to solidify and adopt a Comprehensive Monitoring Plan for the TMDL during year one of implementation. A summary of all monitoring efforts in the Big Basin Hydrologic Unit area are included in Attachment 10 of the Summary of Timber Activities and Proposed Actions Staff Report, Agenda Item #31.

CONCLUSIONS

Evaluation of progress towards achieving the San Lorenzo River Sediment TMDL consists of a multi-pronged approach. During each three-year evaluation (2006/07, and every three years thereafter), Regional Board staff will review the results of the numeric target monitoring in the context of the other monitoring efforts, and in conjunction with information gained from tracking implementation actions. It is important to note that evaluation of numeric targets can only be performed if funding is secured to conduct the monitoring. Similarly, evaluating the targets in the context of other monitoring efforts depends on continuation of those efforts by others.

Regional Board staff recognize that successful integration of the various data and information will require a well-designed process. Such a process is more likely to generate outcomes that provide a foundation for key decisions about whether or not progress is being made towards TMDL achievement.

Important elements of this process include, a communication strategy that ensures participation and assures information is shared in a timely manner, a clear understanding of participatory roles, an approach to assembling information and data that allows for complete and thorough evaluation, and a multidisciplinary evaluation that brings in the perspective of fisheries biologists, hydrologists, and geomorphologists.

In addition to determining whether or not sufficient progress has been made towards implementing actions per the established time schedules, and determining compliance with numeric targets, the evaluation process could also include the following outcomes: identification of the location of persistent problems, the relative degree of severity of problems, the appropriateness of the numeric targets, effectiveness of specific erosion-control projects, and ways to overcome obstacles to implementation.

In conjunction with each three-year review, Regional Board staff will consider changes to the implementation and monitoring approach as necessary. If modifications are needed, staff will propose an amendment of the TMDL

Implementation and Monitoring Plans in the Basin Plan to the Regional Board for approval.

RECOMMENDATION

Information only.

ATTACHMENTS:

A. Resolution R3-2003-0063

(Note: This document can be found on-line at:

http://www.swrcb.ca.gov/rwqcb3/TMDL/documents/RBResolutionandAmendment_002.pdf)

B. Trackable Implementation Actions Table

C. Implementation Status Summary

D. Numeric Targets

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