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

STAFF SUMMARY REPORT (Tina Low) MEETING DATE: April 9, 2008

ITEM: 7

SUBJECT: Proposed Amendment to the Water Quality Control Plan (Basin Plan) for the San

Francisco Bay Region to Establish a Total Maximum Daily Load (TMDL) for Sediment in Sonoma Creek and an Implementation Plan for the TMDL and Related Habitat Enhancement Goals - Hearing to Receive Testimony on Proposed Basin Plan

Amendment

CHRONOLOGY: February 2008 – Public Notice of Proposed Basin Plan Amendment

**DISCUSSION:** 

This is the first of two hearings on a Basin Plan amendment to establish a TMDL and implementation plan to reduce sediment supply and enhance habitat conditions in Sonoma Creek and its tributaries. The proposed amendment and supporting staff report (Appendices A and B, respectively) were available for public comment for 45 days. This hearing provides an opportunity for stakeholders to communicate their interests directly to the Board and for Board members to ask questions of staff and stakeholders.

The proposed amendment is the product of over five years of scientific study and many meetings with watershed stakeholders. Over the last year, we have participated in several community meetings in the Sonoma Valley to discuss the scientific findings, TMDL program, implementation plan, and proposed amendment.

The adoption hearing for this amendment is currently scheduled for the June 2008 Board meeting. By then, we will have completed responses to all written comments and comments presented at this first hearing, and, based on those comments, we will revise the proposed Basin Plan amendment and staff report as appropriate.

## **Background**

Based on evidence of widespread erosion in the Sonoma Creek watershed and the resultant threats to fish habitat, Sonoma Creek was placed on the federal impaired waterbodies list for sedimentation. Beneficial uses impaired as a result of excessive sedimentation in the watershed include cold freshwater habitat, wildlife habitat, fish spawning, recreation, and preservation of rare and endangered species. Although steelhead trout runs appear to have declined substantially since the 1940s, Sonoma Creek still supports a native steelhead run. In fact, Sonoma Creek supports a diverse assemblage of native fish species, as well as the California freshwater shrimp.

To improve our understanding of current fish habitat conditions and the significance of sediment pollution in Sonoma Creek, the Board provided funding to local scientific experts to analyze the factors adversely affecting or limiting fish habitat. This

limiting factors analysis documented that steelhead trout are adversely impacted by the deposition of excess sediment in the stream bed, as well as changes in the physical habitat structure as a result of channel incision (a process in which Sonoma Creek is cutting down into its own bed and banks and lowering its elevation). The limiting factors analysis also documented other significant factors impacting steelhead, including poor rearing habitat due to lack of channel complexity, low summer flows, and barriers to fish passage.

To identify the sources and rates of sediment delivery, a sediment source analysis was completed, using a suite of methods including field surveys and historical information. More than half of the sediment delivered to Sonoma Creek is associated with land use activities, such as accelerated channel incision, vineyards, and grazing. In order to meet water quality standards, human-caused sediment delivery will need to be reduced by approximately 80 percent.

## **Solving the Problem**

The Basin Plan amendment would establish the following for Sonoma Creek:

- Numeric targets for sediment that protect water quality;
- TMDL equal to 125 percent of natural background sediment load;
- Allocations for all significant sediment source categories;
- Implementation plan to achieve the TMDL and related habitat enhancement goals (e.g., habitat complexity, baseflow, stream temperature, and fish passage); and
- Plan and schedule for evaluating and monitoring progress toward meeting the targets.

The implementation and monitoring/evaluation plans for sediment in the Sonoma Creek watershed anticipate an adaptive approach, which relies on our commitment to regular review of the TMDL, implementation actions, and progress in the watershed. This approach is quite similar to the adaptive approach taken on the Napa River Sediment TMDL, which the Board adopted in January 2007.

The proposed implementation plan emphasizes use of our regulatory authorities to develop general waste discharge requirement waiver programs for grape growers, ranchers, other rural property owners, and public agencies to reduce discharges of sediment to channels by 80 percent, as needed to achieve the TMDL. It includes actions needed to attain the TMDL, as well as actions that address the other factors that are adversely impacting the fishery.

In the proposed plan, we recognize and support cooperative actions, locally initiated and already underway, to protect or enhance channel habitat quality, stream temperature conditions, fish passage, and baseflow. We also anticipate the need for cooperative partnerships among local, state, and federal government agencies to jointly resolve fisheries conservation concerns and enhance overall habitat conditions for native aquatic species in the watershed.

## **Comments from Stakeholders**

We received thirteen letters (Appendix C) regarding the proposed Basin Plan amendment and staff report.

U.S. EPA, San Francisco Estuary Institute (SFEI), and California Department of State Parks expressed support of the goals and breadth of the TMDL and Habitat Enhancement Plan. U.S. EPA urged the Board to adopt the TMDL, and requested clarification on the problem statement, numeric targets, and implementation plan. SFEI, writing on behalf of the Critical Coastal Areas (CCA) program, stated that the TMDL will provide the necessary guidance and regulatory framework for the CCA program to assist landowners in implementing appropriate practices to reduce sedimentation and protect beneficial uses. State Parks wrote that the TMDL and Habitat Enhancement Plan supported its department's resource management goals.

However, other stakeholders expressed concern over the scientific validity of the TMDL, and the costs for implementation of the TMDL and Habitat Enhancement Plan. These concerns were expressed by the Southern Sonoma Resource Conservation District, Sonoma County Farm Bureau, North Bay Agricultural Alliance, Western United Dairymen, and Ned Hill (member of the Sonoma Valley Vintners and Growers Alliance). Some of these stakeholders felt resources would be better spent on voluntary, self-directed actions, rather than regulatory requirements.

Caltrans requested the sediment load attributed to it be revised, and that clarification be provided on whether there would be new requirements.

Several commenters urged the Board to do more to restore the health and fishery of Sonoma Creek. The Sonoma Ecology Center advocated for more action to be taken to implement restoration measures recommended in the limiting factors analysis, and for measures to control runoff. The Upper Kenwood Stewardship urged the Board to place more emphasis on restoration and reconnection of Kenwood marsh to Sonoma Creek. Other residents advocated for stronger protection of riparian areas.

We will continue to engage in constructive dialogue to respond to stakeholder concerns. Sediment reduction and related habitat enhancement in the Sonoma Creek watershed are complex issues with some inherent uncertainty regarding the best solutions. Our proposed plan recognizes this uncertainty and provides flexibility and encouragement of local efforts; at the same time it calls for substantive and regular progress.

RECOMMEN-DATION No action is necessary at this time.

APPENDICES:

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