

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

STAFF SUMMARY REPORT (Tina Low)  
MEETING DATE: April 12, 2006

ITEM: 7

SUBJECT: **Proposed Amendment to the Water Quality Control Plan (Basin Plan) for the San Francisco Bay Region to Establish a Sonoma Creek Watershed Pathogen Total Maximum Daily Load (TMDL) and Implementation Plan—Hearing to Consider Adoption of Proposed Basin Plan Amendment**

CHRONOLOGY: February 2006 – Public Notice of Proposed Basin Plan Amendment and Supporting Staff Report

DISCUSSION: This is the first of two hearings on a Basin Plan Amendment to establish a TMDL and implementation plan to control pathogen discharges in the Sonoma Creek watershed and protect the public from exposure to waterborne illness. The proposed Basin Plan amendment and supporting staff report (Appendix A) 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.

During development of this TMDL, we offered many opportunities for stakeholder input and public participation. Prior to development of the Proposed Basin Plan Amendment and supporting Staff Report, we held a CEQA scoping meeting and released our project report for public comment and stakeholder input. In addition, the scientific basis of the TMDL was peer-reviewed, and the peer reviewer concluded that the scientific basis of the proposed regulatory action is sound.

The second step of this two-step hearing process is currently scheduled for the June 2006 Board meeting. By then, we will have completed responses to all written comments and comments presented at this first hearing, and we will revise the proposed Basin Plan amendment and staff report as necessary. The Board will then be able to both consider the comments and responses and to establish the TMDL by adopting the proposed Basin Plan amendment.

### **Background**

Sonoma Creek is included on the 303(d) list as impaired by pathogens. Currently, water quality standards for water contact recreational use are not met at several locations within the watershed.

The most common sources of pathogens are wastes from warm-blooded animals, including humans, livestock, domestic pets, and wildlife. Elevated levels of fecal coliform bacteria have been observed in Sonoma Creek since the 1970s; the presence of these bacteria tells us that people who wade, swim, or fish in these waters may be exposed to waterborne pathogens and are at risk of contracting waterborne diseases such as hepatitis and gastroenteritis.

Controllable pathogen sources in this watershed are septic systems, sanitary sewer lines, urban runoff, dairies, grazing operations, and treated municipal wastewater discharges.

## **Solving the Problem**

The proposed Basin Plan amendment would establish the following for Sonoma Creek and its tributaries:

- Numeric bacteria targets that protect water quality
- A prohibition against all discharges of inadequately treated human waste
- TMDL allocations for all pathogen source categories
- An implementation plan for the TMDL
- A plan and schedule for evaluating and monitoring progress toward meeting the targets

The implementation and monitoring/evaluation plans for pathogens in the Sonoma Creek watershed anticipate an adaptive approach. Adaptive implementation involves taking actions commensurate with available data and information, while continuing to improve our understanding of the problem and its potential solutions. Inherent to this approach is our commitment to regularly review and revise the TMDL and implementation plan as we gain knowledge.

The implementation plan requires all entities within controllable source categories to undertake all reasonable and feasible measures to reduce their contributions of pathogens (or fecal coliforms) to the watershed. This plan builds upon previous and ongoing successful efforts to reduce pathogen loads in Sonoma Creek and its tributaries and requires actions consistent with the state's Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program. Local agencies and municipalities will be required to evaluate septic systems, sanitary sewer lines, and stormwater management practices and develop and implement plans for correcting deficiencies within the framework of existing or forthcoming regulatory programs such as municipal stormwater management programs and sanitary sewer management plans. Grazing lands and dairy operators are expected to implement actions consistent with management of these sources elsewhere in the Region and the state.

## **Public Comments**

We received four letters (Appendix B) regarding the proposed Basin Plan amendment and staff report. We summarize some of the major comments and our preliminary responses below.

### County of Sonoma Permit and Resource Management Department:

The County is responsible for permitting and inspecting septic systems in the watershed. County staff expresses support for improving water quality in Sonoma Creek; however they suggest that additional time and analysis are needed to 1) identify sources more precisely, and 2) determine how the TMDL would interface with pending statewide standards for septic systems. The County also expresses concern about fiscal impacts on homeowners and local government.

We are confident that faulty septic systems are a significant pathogen source, and that actions must begin now to protect recreational users of local waterways from waterborne disease. The proposed implementation measures provide the County with flexibility to formulate a prioritized, site-specific plan and schedule for addressing faulty septic

systems. We will work with the County to refine both the details of the implementation plan and our economic analysis.

Sonoma County Water Agency

Sonoma County Water Agency (SCWA) operates the Sonoma Valley Wastewater Treatment Plant and the Sonoma Valley County Sanitation District. In their letter, SCWA staff comment that more rigorous sampling and analysis are needed to identify pathogen sources. SCWA also comment that the TMDL should be mass-based (rather than concentration-based) and ask why the treatment plant and leaking sewer line discharges have separate allocations.

We agree that additional sampling and analysis would provide useful information, but actions can begin now. An advantage of the adaptive implementation and evaluation/monitoring plans we propose is that they call for early actions in conjunction with gathering additional information. Also, a concentration-based TMDL is appropriate for pathogens and endorsed by US EPA. There are separate allocations for treatment plant and leaking sewer line discharges since they are distinctly different both in location and types of management actions.

Sonoma Ecology Center

The Sonoma Ecology Center expresses support for the TMDL and implementation actions. They note that residents in the watershed are concerned about local water quality and frequently ask whether it is safe for their children to swim. We agree and look forward to working with the Center and other concerned parties to achieve this goal.

US EPA

US EPA supports our use of *E. coli* as a pathogen indicator, and offers a number of constructive comments and suggested changes to make the TMDL consistent with our Region's existing water quality objectives as well as with forthcoming statewide water quality objectives for bacteria. We will continue to work with US EPA to make appropriate changes, while implementing the most current US EPA guidance with regard to bacteria objectives.

RECOMMEN-  
DATION

No action is necessary at this time.

APPENDIX:

- A. Proposed Basin Plan Amendment and Supporting Staff Report, *Pathogens in the Sonoma Creek Watershed, Total Maximum Daily Load* (February 10, 2006).
- B. Comment Letters