

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

STAFF SUMMARY REPORT (James D. Ponton)
MEETING DATE: January 13, 2010

ITEM: 9

SUBJECT: **Total Maximum Daily Load (TMDL) Program — Status Report**

CHRONOLOGY: February 2006 – Last TMDL Program Update

DISCUSSION: This item provides a status report on our TMDL development and implementation program. The report includes a brief summary of the TMDL development process, examples of TMDL implementation actions and strategies, a list of TMDLs developed and adopted by the Board since 2006, and a preview of TMDLs scheduled for completion and Board consideration over the next two to three years.

Since our last program update in 2006, the Board has adopted eight TMDLs that address 26 listings (pollutant-water body combinations) of impaired water bodies. Between now and December 2011, we anticipate asking the Board to consider adopting TMDLs that would address nineteen listings associated with the following: sediment in the Lagunitas Creek watershed in Marin County; pathogens in Pacifica beaches and San Pedro Creek in San Mateo County; pathogens in Tomales Bay coastal areas; selenium in North San Francisco Bay; sediment in the Walker Creek watershed in Marin County; and three TMDLs for nutrients, sediment, and mercury in Tomales Bay.

At the same time, we'll be in the early stages of TMDL development for eight additional listings associated with the following: sediment in the Butano/Pescadero Creek watersheds in San Mateo County; toxic hotspots in San Leandro Bay; nutrients in both the Sonoma Creek and Napa River watersheds, and nutrients, pathogens, and sediment in the Petaluma River watershed.

Overview of the TMDL Development and Implementation Process

The federal Clean Water Act requires states to identify impaired waters and the pollutants causing those impairments. The list of impaired water bodies is often referred to as the "303(d) list", referencing the identification requirement in section 303(d) of the Clean Water Act. In California, the State Board adopts the statewide list of impaired water bodies, with input from the regions and stakeholders. The Board adopted a resolution approving the transmittal of our region's updated 303(d) list to the State Board in February 2009. Following the State Board's and U.S. EPA's review and approval of the statewide list, it will become the 2010 303(d) list that we will follow.

The Clean Water Act further requires states to establish Total Maximum Daily Loads (TMDLs) for the listed pollutants in listed waters. TMDLs are essentially water body-specific cleanup or restoration plans that target the pollutants causing impairment. We

typically establish TMDLs via amendments to the Water Quality Control Plan for the San Francisco Bay Basin (our “Basin Plan”).

Essential components of TMDLs include:

- Numeric target(s) that define the desired or “restored” condition of the water body
- A determination of the maximum amount of pollutant(s) or stressor(s) the water body can tolerate while meeting these targets
- Identification of the sources of the pollutant(s) reaching the water body
- Allocations of pollutant loads or load reduction responsibility to these sources
- An implementation plan for regulatory and other actions to achieve allocations and the TMDL.

For each TMDL, we prepare a project plan that identifies key issues, information needs, studies, analyses and tasks necessary to complete each of the required elements. The project plan includes consideration of stakeholder participation and input. The timeline and level of effort for TMDL development depends on staff and contract resources, available data, and the complexity of the impairment problem.

Adoption of a Basin Plan amendment that establishes a TMDL and implementation plan typically encompasses two Board hearings. The first hearing follows a publicly-noticed public comment period on the proposed Basin Plan amendment and supporting staff report. This hearing provides interested parties with an opportunity to give the Board their views on the proposed regulatory action in person, and for Board members to ask questions of staff and stakeholders. Based on these comments and questions, as well as comments received during the comment period, we revise the staff report and the Basin Plan amendment. At the second hearing, the Board is asked to establish the TMDL by adopting the proposed (revised) Basin Plan amendment. If the Board adopts it, we send the TMDL for approval to the State Board (which gives stakeholders an additional opportunity to comment), which then sends it to the California Office of Administrative Law, and finally to U.S. EPA for approval.

Our TMDL website provides an expanded discussion on the TMDL development process and provides a list of finalized (U.S. EPA-approved) TMDLs, active TMDL projects, TMDL work products, forthcoming meetings and workshops. The TMDL website is at: http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/TMDLs

TMDL Implementation

The implementation plan associated with each TMDL outlines a strategy and schedule to achieve pollutant load reductions and water quality improvements. Implementation relies on an “adaptive management” approach. This means that our staff continues to work with responsible parties and stakeholders in the impaired water body’s watershed, and to review new data or technical information as it becomes available. When necessary, we can ask the Board to revisit the TMDL and change elements of the Basin Plan to respond to current conditions.

The success of any TMDL is dependent on successful implementation, which in turn relies on ongoing relationships between our staff and stakeholders, dischargers, and other responsible parties. Success also relies in part on coordination and integration

with our core regulatory programs, including the NPDES-wastewater, NPDES-stormwater, and nonpoint source programs.

Recent examples of TMDL implementation regulatory actions that cross the Board's divisions include:

Core Program	Regulatory Action	TMDL Drivers
NPDES-Wastewater	Waste Discharge Requirements for Municipal and Industrial Discharges of Mercury to San Francisco Bay – November 2007	This Bay-wide permit implements the San Francisco Bay Mercury TMDL for the municipal and industrial wastewater load source.
Nonpoint Source	Conditional waiver of waste discharge requirements for vineyards - under development	This waiver will implement the Napa River and Sonoma Creek sediment TMDLs and require vineyard operators to take actions to control pesticides, nutrients, and pathogens in these watersheds.
	Conditional Waiver of Waste Discharge Requirements for Grazing Lands in the Tomales Bay Watershed – July 2008	This waiver implements the Tomales Bay Pathogens TMDL and the Walker Creek Mercury TMDL for the grazing lands load source.
NPDES-Stormwater	Municipal Regional Stormwater Permit – October 2009	This permit implements the San Francisco Bay mercury and PCBs TMDLs and the Water Quality Attainment Strategy for Diazinon and Pesticide-Related Toxicity in Urban Creeks for the urban stormwater load source.

TMDL Project Status - 2006-09

TMDL Project	303(d) Listings	Board Adoption	State Board Approval	US EPA Approval
Napa River pathogens	1	June 2006	Sept. 2007	Feb. 2008
Sonoma Creek pathogens	1	June 2006	Sept. 2007	Feb. 2008
Napa River sediment*	1	Sept. 2009		
Walker Creek mercury	1	Jan. 2007	July 2008	Sept. 2008
SF Bay PCBs	15	Feb. 2008	Oct. 2009	
Richardson Bay pathogens	1	July 2008	July 2009	
Guadalupe River mercury	5	Oct. 2008	Nov. 2009	
Sonoma Creek sediment	1	Dec. 2008		
Total Listings	26			

* TMDL was originally adopted by the Board in January 2007 and was withdrawn from State Board consideration in May 2008 for CEQA considerations.

TMDL Projects Planned for Board Consideration - 2010-12

TMDL Project	303(d) Listings	Anticipated Board consideration
Lagunitas Creek sediment	1	2010-11
Pacifica beaches and San Pedro Creek pathogens	3	2010-11
Tomales Bay coastal pathogens	4	2010-11
North SF Bay selenium	5	2011-12
Tomales Bay mercury	1	2011-12
Tomales Bay nutrients	3	2011-12
Tomales Bay sediment	1	2011-12
Walker Creek sediment	1	2011-12
Total Listings	19	

RECOMMEN-
DATION: This item is for information only and no action is required.