

## Total Maximum Daily Load (TMDL)

### Overview

The Federal Clean Water Act Section 303(d) requires states to develop lists of impaired water bodies and develop load reduction programs (called TMDLs) that insure that the impaired water body meet *standards* (water quality objectives to protect beneficial uses) by a specified date. A TMDL establishes numeric targets to attain applicable water quality standards, establishes the waterbody's maximum allowable pollutant load consistent with those targets, and allocates the allowable load among the pollutant sources. The Board typically establishes the TMDL and its implementation plan through an amendment to the Basin Plan.

Approximately every two years, the 303(d) list is updated through a public process as part of the development of the [Integrated Report](#). The integrated report identifies how many miles or acres of surface water bodies within each Region are good, intermediate or impaired. The Central Valley Water Board has placed a high priority on addressing the most significant and wide-spread water quality impairments and have [adopted TMDLs](#) that encompass entire watersheds, including hundreds of miles of streams and large numbers of dischargers (e.g. Nutrient and Mercury in Clear Lake; Delta Mercury; Salt and Boron in the Lower San Joaquin River; and Selenium in the San Joaquin River Basin).

There are currently 730 Central Valley waterbody-pollutant segments listed as impaired on the state's 303(d) list. TMDLs and other Board actions have addressed 124 of these listings and 606 currently need to be addressed, but that number will change as the 303(d) list is updated and additional TMDL projects completed. Funding for the program comes from both Waste Discharger Permit Fees (8.7 staff) and Federal USEPA (3.5 staff). The graph below shows how these resources are allocated. All program staff work out of the Rancho Cordova office.

### Goals

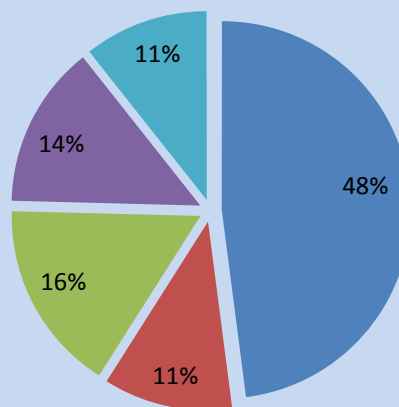
- Develop and implement TMDLs and other pollution control requirements to address the highest priority pollutants and stressors in surface waters: pesticides; mercury; salt; selenium; and low dissolved oxygen.
- Implement TMDL-program related portions of the Board's [2014 Delta Strategic Plan](#).
- Address 303d listings efficiently, including addressing multiple 303(d) listings with one project, developing programs that prevent potential future 303(d) listings, documenting when waterbodies can be de-listed, and documenting when existing control programs preclude the need for TMDLs.
- Coordinate with the Board's regulatory programs to ensure the TMDLs and other pollution control requirements are implemented correctly and water quality impairments are reduced.
- Update the 303(d) list of impaired waters.

### Major Program Accomplishments

The Central Valley Water Board has placed a high priority on addressing the most significant and wide-spread water quality impairments and have [adopted TMDLs](#) that encompass entire watersheds, including hundreds of miles of streams and large numbers of dischargers (e.g. Nutrients and Mercury in Clear Lake; Delta Mercury; Salt and Boron in the Lower San Joaquin River; Selenium in the San Joaquin River Basin; and diazinon and chlorpyrifos in the Sacramento, Feather and San Joaquin Rivers and the Delta). TMDL projects and other Board actions completed to date have addressed 124 303(d) listings.

## TMDL Staff Activities: FY 15/16

- Developing TMDLs (5.85 PY)
- Implementing TMDLs (1.5 PY)
- 303(d) List Update (2 PY)
- De-listing (1.7 PY)
- Program Mgmt (1.3 PY)



Total TMDL Staff Resources - 12.2 PY

## Accomplishments for Fiscal Year 2015 – 2016

### TMDL Development

- *Pyrethroid TMDL and Basin Plan Amendment* -- Worked extensively with stakeholders and held three Board workshops to discuss potential numeric targets/triggers, analytical constraints and implementation options for a pyrethroid pesticides Control Program in the Sacramento and San Joaquin Basins, which will address 15 pyrethroid impairments. Revised date of Board hearing to consider adoption of the Control Program as a Basin Plan amendment to early 2017.
- *Diuron* – Recent data indicate several diuron impairments are being addressed by the Board’s Irrigated Lands Regulatory Program. Staff documented these improvements for a water quality “report card” and the upcoming Integrated Report/303(d) list update.
- *Statewide TMDL for mercury-impaired reservoirs* - Held outreach meetings with reservoir owners and operators and other stakeholders to solicit comments on the concept of a phased TMDL that includes reservoir pilot tests to evaluate water chemistry and fisheries management to reduce mercury levels in fish.

### TMDL Implementation

- Delta Mercury Control Program & Exposure Reduction Program - Reviewed mid-term progress reports for entities conducting methylmercury management studies. Held quarterly exposure reduction meetings for education and networking among stakeholders; trained grant recipients to conduct education in their communities; outreach to numerous local agency and community organizations in five Delta counties; developed educational materials, including translations into eight languages; and developed fish consumption advisory signs to be posted in the Delta.
- Diazinon/chlorpyrifos: Continued to work with the Boards’ regulatory programs to implement TMDLs in permits. Continued ongoing coordination with the California Department of Pesticide Regulation and USEPA’s Office of Pesticides on pesticide use regulation.

## Performance Targets for Fiscal Year 2015 – 2016

<u>TMDL Project</u>	<u>Target</u>	<u>Completed</u>
Pyrethroid TMDL and Basin Plan Amendment	15 Listings Addressed	0
Pyrethroid TMDL and Basin Plan Amendment	1 Basin Plan Amendment	0

Projects delayed due to Board direction to conduct additional stakeholder input and for staff to consider and evaluate additional alternatives to the control program.