

FACT SHEET - Total Maximum Daily Loads for Organophosphate Pesticides and Aquatic Toxicity in the Lower Salinas River Watershed

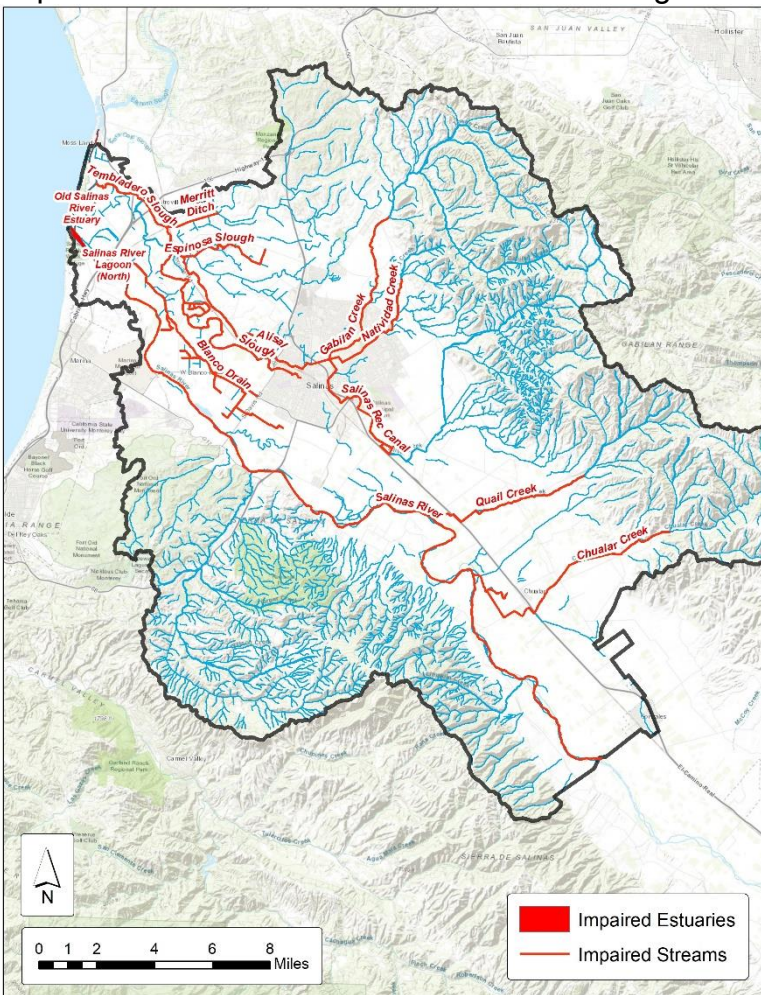
What is a Total Maximum Daily Load (TMDL)?

[TMDLs](#) are strategies to improve water quality and restore clean water. The federal Clean Water Act requires every state to evaluate its water quality data and maintain a list of waters that are “impaired” because the water does not meet water quality standards. The Clean Water Act further requires states to develop and implement a plan to reduce pollutants so that the waterbody is no longer impaired and can be removed from the impaired waters list.

The term total maximum daily load or TMDL is used to describe the maximum amount of a pollutant that a waterbody can receive and still meet [water quality standards](#). A TMDL study identifies the probable sources of pollution, establishes the maximum amount of pollution a waterbody can receive and still meet water quality standards, and allocates that amount to all probable contributing sources.

Project Description

Several streams within the lower Salinas River watershed are on the impaired waters list due to excessive levels of organophosphate pesticides (i.e., chlorpyrifos, diazinon, and malathion) and aquatic toxicity (see figure below and table on next page). The TMDL study will establish organophosphate pesticide and aquatic toxicity TMDLs for waters within the lower Salinas River watershed to restore water quality and protect beneficial uses. The Central Coast Water Board is required under both state and federal law to regulate discharges and protect beneficial uses of waters of the state.



Project Area

The lower Salinas River watershed (project area) encompasses an area of approximately 390 square miles in northern Monterey County. It extends from approximately the City of Gonzales north to Monterey Bay and the Pacific Ocean. There are two major drainage ways leading to Moss Landing Harbor and Salinas River Lagoon. Major drainages to Moss Landing Harbor include Old Salinas River Estuary, Old Salinas River, Tembladero Slough, Merritt Ditch, Alisal Slough, Espinosa Slough, Salinas Reclamation Canal (lower and upper)¹, Gabilan Creek, and Natividad Creek. The drainages to Salinas River Lagoon include the Salinas River, Blanco Drain, Quail Creek, and Chualar Creek. There is hydraulic connectivity between the Salinas River Lagoon and the Old Salinas River via a slide gate at the northwest end of the Salinas River Lagoon.

¹ Note: the Salinas Reclamation Canal is segmented into upper and lower reaches, separated by Carr Lake.

Organophosphate pesticide and aquatic toxicity impaired waterbodies.

Waterbody Name	Impairment
Alisal Creek (Monterey County)	toxicity
Alisal Slough (Monterey County)	diazinon, toxicity
Blanco Drain	chlorpyrifos, diazinon, toxicity
Chualar Creek	chlorpyrifos, diazinon, malathion, toxicity
Espinosa Lake	chlorpyrifos, diazinon,
Espinosa Slough	diazinon, malathion, toxicity
Gabilan Creek	toxicity
Merritt Ditch	diazinon, toxicity
Moss Landing Harbor	chlorpyrifos, diazinon
Natividad Creek	diazinon, toxicity
Old Salinas River	chlorpyrifos, diazinon, toxicity
Quail Creek	chlorpyrifos, diazinon, malathion, toxicity
Salinas Reclamation Canal	chlorpyrifos, diazinon, malathion, toxicity
Salinas River (lower, estuary to near Gonzales Rd)	chlorpyrifos, diazinon, toxicity
Salinas River Lagoon (North)	chlorpyrifos, toxicity
Tembladero Slough	chlorpyrifos, diazinon, malathion, toxicity

What are the Sources of Water Quality Problems?

The primary sources of organophosphate pesticides will be confirmed by staff during TMDL development but are currently believed to be from agricultural and urban lands. Organophosphate pesticides also cause aquatic toxicity.

The TMDL Process and Public Participation

Central Coast Water Board staff (staff) are in the initial phases of developing this TMDL. The TMDL must be adopted by the Central Coast Water Board and subsequently approved by the State Water Resources Control Board, the California Office of Administrative Law (which defines the effective date of the TMDL), and finally by the U.S. Environmental Protection Agency. Staff anticipate completing this TMDL in 2020.

Public participation is an important element throughout the course of TMDL development. Central Coast Water Board staff will notify interested parties of opportunities for public participation including public meetings and workshops; we also solicit public comments and encourage other forms of public participation through correspondence, email, and other informal contacts.

For More Information

The Central Coast Water Board encourages your participation in this TMDL project. To receive future project announcements please subscribe to the electronic email list by checking the box for the Salinas River Pesticides TMDLs at:

https://www.waterboards.ca.gov/resources/email_subscriptions/reg3_subscribe.html

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