

FACT SHEET

DEVELOPMENT OF TOTAL MAXIMUM DAILY LOADS FOR BORON: ESTRELLA RIVER BASIN STREAMS

What is a Total Maximum Daily Load (TMDL)?

TMDLs are strategies or plans to address impaired waters identified on the federal Clean Water Act section 303(d) list. The Clean Water Act requires every state to evaluate its waterbodies and maintain a list of waters that are considered "impaired" either because the water exceeds water quality standards or does not achieve its designated use. For each water on the Central Coast's "303(d) Impaired Waters List," the California Central Coast Water Board must develop and implement a plan to reduce pollutants so that the waterbody is no longer impaired and can be de-listed.

"Total Maximum Daily Load" (TMDL) is a term used to describe the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards. A TMDL project identifies the probable sources of pollution, establishes the maximum amount of pollution a waterbody can receive and still meet water quality standards, and establishes a plan to rectify the water quality impairments. Occasionally, failure to attain water quality standards in streams is a result of local natural conditions. In these cases, the TMDL is used as a strategy which may include recommending a water quality standards action; recommending site-specific water quality objectives; or other appropriate administrative action.

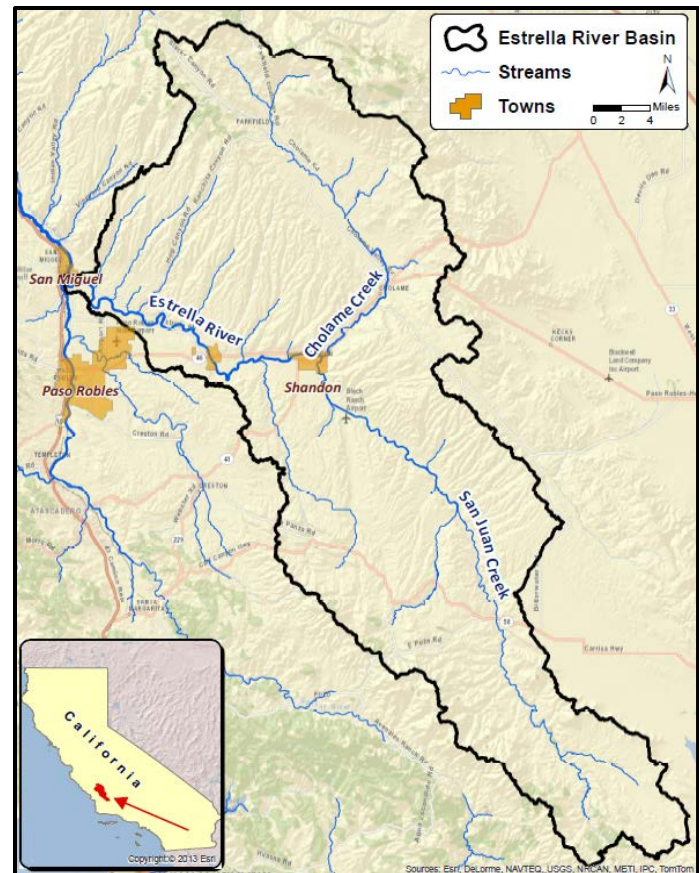
Location and Watershed Description

The Estrella River Basin drains a 950 square mile rural area of eastern San Luis Obispo County and southeastern Monterey County. The basin is comprised largely of native vegetation; human land use activities in the basin are mainly limited to dry land farming, vineyard cultivation, and livestock grazing. Due to local climatic and hydrologic conditions, surface flows in most stream reaches are intermittent or infrequent.

What are the Sources of Boron?

Water quality data from Estrella River Basin streams indicate elevated levels of boron. In any given watershed, boron contamination of streams may result from natural leaching of rocks and soils, groundwater inputs, wastewater discharges, pesticides and fertilizers, or a combination of these sources. Preliminary review of available data indicates that the boron stream impairments in the Estrella River Basin may be due to natural sources. Natural sources that may cause or contribute to elevated levels of boron in streams could include leaching of

rocks and soils, groundwater inputs, and atmospheric deposition.



Estrella River Basin

Why Do We Need a Boron TMDL for the Estrella River Basin?

TMDLs are required by federal law to implement state water quality standards. California's water quality standards designate beneficial uses for each waterbody (e.g., drinking water supply, agricultural supply, aquatic life support, recreation, etc.) and the scientific criteria to support those uses.

The Central Coast Water Board is required under both state and federal law to protect and regulate beneficial uses of waters of the state. Water quality data from Estrella River Basin streams indicate elevated levels of boron. Water Board staff are in the initial phases of developing a TMDL for the Estrella River Basin intended to address elevated levels of boron in surface waters. Note that when the water quality impairment is due to natural conditions, the TMDL may recommend a non-regulatory administrative action such as recommending a water quality standards action; recommending site-specific water quality objectives; or other appropriate action.

The TMDL Process

A TMDL is developed by Central Coast Water Board staff. A TMDL developed by staff must be approved by the Central Coast Water Board. Public participation is an element of TMDL development. Water Board staff notify interested parties of opportunities for public participation through public meetings/workshops, we solicit public comments, and we encourage other forms of public participation through correspondence, email, and other informal contacts.

For More Information

The Central Coast Water Board encourages interest and involvement in TMDL projects from stakeholders, interested parties, and the general public. Please refer to the Water Board's TMDL webpage at:

http://www.waterboards.ca.gov/centralcoast/water_issues/programs/tmdl

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Estrella River at Estrella Rd. and Hwy. 46, July 2006