Klamath Basin Total Maximum Daily Loads - Fact Sheet

Staff of California's North Coast Regional Water Quality Control Board (Regional Water Board) are working on the Total Maximum Daily Loads (TMDLs) for the Klamath Basin, including the Klamath, Lost, Shasta, Scott, and Salmon Rivers. This Fact Sheet answers frequently asked questions about TMDLs.

What is a TMDL?

A TMDL is a framework for assessing the condition of a watershed, evaluating the factors that contribute to identified water quality problems in the waterbody, and for developing a plan to restore healthy water quality conditions. There are five general objectives of a TMDL:

1. To assess the condition of a waterbody, and determine/confirm cause(s) / source(s) of stress.
2. To quantify the sources of the pollutant or stressor.
3. To determine how much of a particular pollutant or stressor a waterbody can handle and still meet desired conditions.
4. To identify whether and how much the different sources need to be reduced in order to support desired conditions.
5. To develop a plan which, when implemented, will restore waterbody health.

What are the components of a TMDL?

There are four steps to developing a TMDL. The first step is developing a Technical TMDL. The second step is developing an Implementation Plan (also called an Action Plan). The third step involves getting approval of the TMDL by the Regional Water Board, the State Water Resources Control Board, and the US EPA, and finally incorporating the TMDL into the North Coast Water Quality Control Plan. The fourth step is implementing the TMDL.

The Technical TMDL quantifies the natural and human-related sources of the pollutant(s) or stressor(s) that are causing impairment, determines how much of the pollutant(s) or stressor(s) the waterbody can handle while still supporting the designated uses, and it determines how much, if any, the identified sources need to be reduced in order to achieve the target conditions. The Implementation Plan outlines a strategy and schedule to achieve the target conditions.

Why are TMDLs being developed for the Klamath Basin?

Section 303(d) of the federal Clean Water Act requires states to identify waterbodies that are impaired, to identify the pollutant(s) or stressor(s) that are causing impairment, and to develop a plan (the TMDL) to attain and maintain desired water quality standards. An "impaired" waterbody is one that is not meeting water quality standards and/or not supporting the designated beneficial uses of the waterbody. Though the Clean Water Act has been in place since 1972, California did not begin developing TMDLs until the 1990s.

What TMDLs are being developed in the Klamath Basin?

Pollutant	**Watershed** Klamath River	Lost River	Tule Lake & Lower Klamath Ntl. Wildlife Refuge	Shasta River	Scott River	Salmon River
Temperature	X	X	X	X	X	X
Nutrients	X	X	X			
Dissolved Oxygen	X			X		
Sediment					X	
pH			X			

These waterbodies were added to the 303(d) List based on water quality data specific to the waterbodies, as well as information on the status of the fisheries in these watersheds. These listings were based on fisheries status because beneficial uses of waterbodies associated with fisheries tend to be the uses most sensitive to water quality changes.

What is the schedule for completing the Klamath Basin TMDLs?

Watershed	Public Draft TMDL and Implementation Plan	Regional Board Adoption Hearing for TMDL and Implementation Plan	EPA Approval of TMDL Including Implementation Plan	RWQCB Staff Begins TMDL Implementation
Upper Lost River	October 2003	Proposed Delist June 2004	TBD as 303(d) action	Not Applicable
Lower Lost River	Spring 2006	N/A	April 2007	To Be Determined
Klamath River	October 2006	January 2007	August 2007	September 2007
Shasta River	February 2006	May 2006	January 2007	February 2007
Scott River	September 2005	December 2005	October 2006	November 2006
Salmon River	April 2005	May 2005	August 2005	August 2005

Where will we obtain data/information for developing the TMDL?

Our goal is to understand the conditions specific to the individual rivers of the Klamath Basin, and to develop targets that are appropriate for these individual rivers. Therefore, we conduct water quality monitoring in each watershed to meet as many of the TMDL data needs as possible. Where we are unable to collect new data in a watershed, we assess data collected in the watershed in the past. If necessary, we use relevant studies and data from other watersheds in developing the TMDL. We prefer to use current watershed-specific data in order to develop a meaningful, relevant, and realistic TMDL.

How is California coordinating with Oregon?

Given the interstate nature of the Klamath and Lost Rivers, California's Regional Water Board and Oregon's Department of Environmental Quality (DEQ), with the support of US EPA (Regions 9 and 10), have agreed to jointly develop TMDLs for both the Lower Lost River and Klamath River (mainstem). The states and the regions have signed a Memorandum of Agreement outlining roles, responsibilities, and communication processes for the states and EPA for completing these TMDLs.

How will we collaborate with stakeholders?

There are numerous opportunities for stakeholder participation in TMDL development and implementation. The Regional Water Board distributes information to the public by direct mailing to interested parties and by posting on our Klamath River TMDL web page (http://www.swrcb.ca.gov/~rwqcb1/programs/tmdl/klamath/klamath.html). We are holding meetings with focus groups to provide information about the TMDL development process and approach, to understand stakeholder concerns, and respond to questions. We also hold public informational meetings for each watershed to provide information about the TMDL program, present draft results, and serve as a vehicle for public comment. We work with other agencies to coordinate monitoring/assessment efforts. If you wish to be on our interested parties list, please contact us.

Contact Us

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For information about the Klamath and Lost River TMDLs in Oregon, please contact Steve Kirk, Oregon DEQ, at (541) 388-6146 x235, or by email at Kirk.Steve@deq.state.or.us. For more information about Oregon's TMDLs, visit DEQ's web page at http://www.deq.state.or.us/er/KlamathTMDL.htm.