

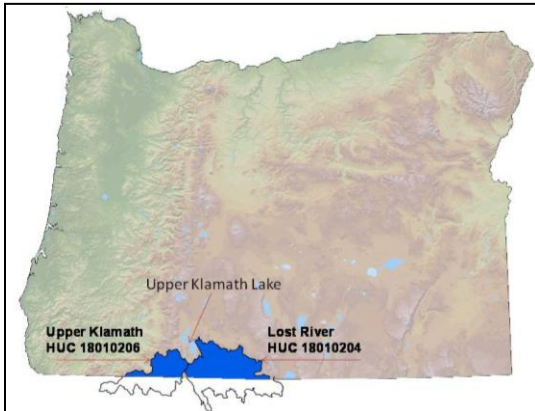
Upper Klamath and Lost Subbasins: Temperature TMDLs



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Upper Klamath and Lost Subbasins.

Background

The Upper Klamath and Lost Subbasins are within the Klamath Basin, in the southern portion of Oregon. Several stream segments of these subbasins do not currently meet state water quality standards for temperature.

This fact sheet summarizes DEQ's plans to reduce pollution and address water quality concerns in the Klamath River, Lost River, and multiple other streams in the Upper Klamath and Lost Subbasins. This plan is designed to ensure the rivers and streams are healthy for fish and other aquatic life, and are safe for fishing and other recreational and beneficial uses.

The federal Clean Water Act requires DEQ to develop a plan with goals and pollution control targets for improving water quality in watersheds where water quality standards are not met. DEQ is doing this in the Upper Klamath and Lost River Subbasins by establishing limits known as Total Maximum Daily Loads (TMDLs) for heat—the pollutant causing water quality standard violations.

A TMDL is the maximum amount of pollution that can be present in a waterbody without exceeding standards. It utilizes scientific data collection and analysis to determine the amount and source of each pollutant entering the river system, and allocates “pollutant loads” to each source at levels that would ultimately restore water quality to clean water standards. A pollution load is the amount of each pollutant a waterway can receive and not violate water quality standards.

The problem

Water temperature can be greatly affected by a variety of human activities as well as natural sources. The principal human-caused sources of stream heating within the Klamath and Lost Subbasins include:

Nonpoint sources:

- Excessive heat from the sun due to the removal or reduction in streamside vegetation (Upper Klamath Subbasin tributaries and Lost Subbasin)
- Discharge by discrete nonpoint sources
- Channel modification
- Dam and reservoir operation and modification (considered nonpoint sources that influence the quantity and timing of heat delivery to downstream river reaches)
- Diversions from irrigation activities

Point sources:

- Discharge from wastewater treatment plants and industrial operations (mainstem Klamath River only)

TMDL Analysis

A temperature TMDL defines the amount of heat that can be added and still be protective of the waterbody. The TMDL analyzes the effects of point source discharges, nonpoint source discharges, and natural background sources and allocates these load amounts among the sources.

The load allocations for the sources are the part of the overall budget that is assigned to the source. For point sources, DEQ will address the allocations through the permitting process. For nonpoint sources, the load will be managed through a series of TMDL implementation planning activities.

Water quality management plan

The TMDL includes a Water Quality Management Plan that identifies strategies and approaches for accomplishing water quality improvements. The plan identifies local, state and federal government or private entities with responsibility for addressing pollution under their control. For this TMDL, these entities are referred to as Designated Management Agencies

or Responsible Persons. The plan also proposes management strategies designed to meet the allocations in the TMDLs and establishes a schedule for the submission of implementation plans.

Public process and participation

There are numerous opportunities for stakeholder participation in TMDL development and implementation. DEQ distributes information to the public by direct mailing to interested parties and by posting on the Klamath Basin TMDL webpage at:

www.oregon.gov/deq/wq/tmdls/Pages/TMDLs-Klamath-Basin.aspx

To be placed on the mailing list or have questions addressed regarding the TMDL process, public process, stakeholder list, and information posted on the Klamath Basin webpage, please contact Mike Hiatt, Basin Coordinator, at 541-273-7002, or by email: hiatt.mike@deq.state.or.us.

Alternative formats

DEQ can provide documents in an alternate format or in a language other than English upon request. Call DEQ at 800-452-4011 or email deqinfo@deq.state.or.us.

