

## Rogue Basin: Pollution Limits Proposed to Improve Water Quality

Hearing to be held November 12, 2008, comments due December 1, 2008 on water quality documents known as "Total Maximum Daily Loads."

### What is a Total Maximum Daily Load?

Many water bodies in Oregon do not meet water quality standards for various pollutants at certain times of the year. In the Rogue Basin, bacteria, temperature, sedimentation, pH, and dissolved oxygen have been identified as water quality impairments. The Total Maximum Daily Load (TMDL) for each pollutant is determined by scientific data collection and analysis to determine how much of a pollutant a water body can receive and still meet water quality standards. Water quality standards are intended to protect the most sensitive beneficial uses in a water body.

### Background

Water bodies that do not meet water quality standards are placed on a state list of impaired water bodies. Rivers, streams or lakes that are on the list require the development of a TMDL. In the Rogue basin the TMDL process began in 1992 with the development of the Bear Creek TMDL.

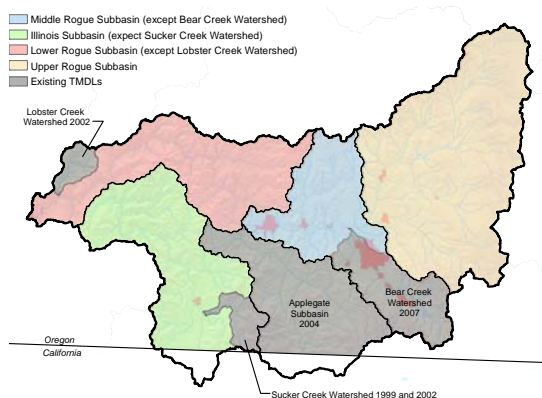


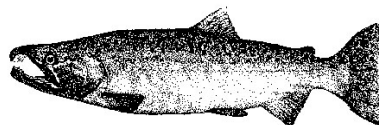
Figure 1. Area Addressed: Rogue TMDL

Since that time TMDLs have been developed for Upper and Lower Sucker Creek (1999, 2001), the Lobster Creek

Watershed (2002), the Applegate Subbasin (2004), and additional parameters in the Bear Creek Watershed (2007). The Rogue Basin TMDL, scheduled for completion in 2008, will address water quality impairments in the remainder of the Rogue Basin (Figure 1). What follows is an overview of each water quality parameter addressed in the Rogue Basin TMDL.

### Temperature TMDLs

The temperature water quality standard is intended to protect salmon, steelhead, trout and other cold-water fishes, the most sensitive beneficial uses in the water body. The temperature standard is also protective of the different life stages of cold water fishes including spawning, rearing, and migration.



Coho salmon  
(*Oncorhynchus kisutch*)  
Photo Courtesy Washington DFW

Water temperature is greatly affected by a variety of human activities associated with how land is used for forestry, agricultural, residential, urban and industrial purposes. The TMDL process develops heat allocations or allowable impacts for the various sources of heat on the Rogue River



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and its tributaries. This includes wastewater treatment facilities, federally managed dams, irrigation districts and sources of water runoff pollution such as cities, rural areas, and agricultural lands. When all sources achieve the targets specified in the TMDL, water temperature standards will be met.

#### **Bacteria TMDLs**

Wastewater discharge from industry and sewage treatment facilities may cause bacterial contamination. Runoff from farms, urban and rural areas, confined animal feeding operations, irrigation districts and other sources may also contribute to bacterial contamination. High bacteria levels pose an unacceptable risk of illness to those in contact with the water. The Rogue Basin Bacteria TMDL sets loads and determines how much current bacterial levels will need to be reduced to provide for safe water contact recreation during all times of the year.

#### **Dissolved Oxygen**

DEQ has identified ten small tributary streams in the Rogue River Basin that are impaired due to dissolved oxygen levels that do not meet standards. Dissolved oxygen levels are related to water temperature, and other processes that impact oxygen levels. There are currently insufficient data to develop a TMDL, but DEQ does expect some improvements in dissolved oxygen levels due to the implementation of the temperature TMDL.

#### **pH**

North Fork Little Butte Creek and Fish Lake have experienced pH violations. pH refers to the level of acidity or alkalinity of the water. Fluctuations can be caused by several factors, and are an indicator of imbalances in biological activity. There is currently not enough data to develop a TMDL for pH but DEQ does intend to more closely examine the pH listings in the near future.

#### **Sedimentation**

There are six small tributary streams in the Rogue River Basin that are impaired due to excess sediment. Increased sedimentation can directly affect fish and other aquatic organisms. DEQ is in the process of developing a numeric sedimentation standard. When the standard and associated guidance is completed, the agency will establish a timeline for the development of sedimentation TMDLs for these waterways.

#### **Water Quality Management Plan**

The TMDL includes a Water Quality Management Plan designed to identify strategies and approaches for implementing the TMDLs. The WQMP identifies designated management agencies (DMAs) as those entities with jurisdiction over uses that may impact water quality. The Rogue Basin DMAs include Jackson, Josephine and Curry Counties, all cities, US Army Corps of Engineers, US Forest Service, Bureau of Land Management, Oregon Department of Agriculture, Oregon Department of Forestry, irrigation districts, permitted sources and others. The WQMP also establishes a schedule for the submission of Implementation Plans by the DMAs. Implementation plans detail the management strategies and timing of actions to meet the allocations in the TMDL.

#### **Next Steps: Public Process**

The Rogue Basin TMDLs have been developed using data collected from various partnering watershed councils and organizations over the course of several years. A technical advisory team has been meeting monthly since December 2007. This group of local stakeholders has made many recommendations during the process that have greatly improved these TMDLs.

The public comment period on the draft Rogue Basin TMDL will open on October 1, 2008 and close on December 1, 2008. An informational meeting to present background on the technical components of



the draft TMDLs will be presented prior to the public hearing held on November 12. The presentation will begin at 6:30 p.m. at the Anne Basker Auditorium, 604 NW 6<sup>th</sup> Street, Grants Pass. The public hearing will follow. Copies of the document are available at several locations in the area including:

Medford Public Library  
413 W Main St, Medford  
(541) 774-8689

Grants Pass DEQ Office  
302 SE H Street  
Grants Pass, OR 97526  
Phone: (541) 471-2850

Illinois Valley SWCD  
Josephine Co. Office Bldg 102 S.  
Redwood Hwy.  
Cave Junction, OR 97523  
541 592-3731

Curry Public Library

29775 Colvin  
Gold Beach  
(541) 247-7246

Medford DEQ Office  
221 Stewart Avenue  
Medford, OR  
Phone: (541) 776-6010

Copies of the document are also available at the Eugene and Portland DEQ offices and on the internet at  
<http://www.deq.state.or.us/wq/TMDLs/TMDLs.htm>

**For more information**

For more information about the Rogue Basin TMDLs, or to request a presentation for your group, please contact Bill Meyers, 541-776-6010 extension 253.

**Alternative Formats**

*Alternative formats of this document can be made available. Contact DEQ Public Affairs for more information (503) 229-5696.*