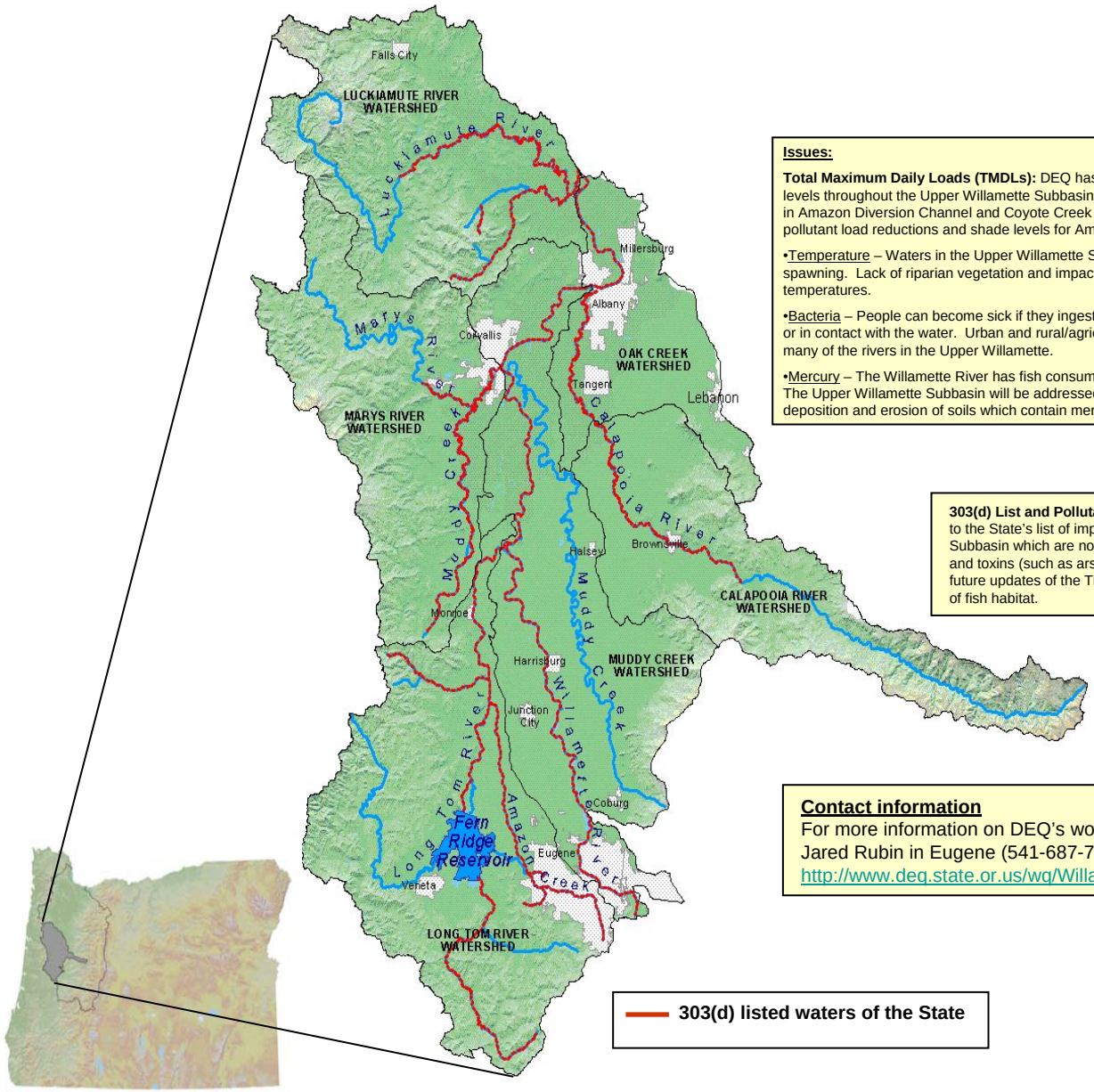
Upper Willamette Subbasin Water Quality Overview

State of Oregon Department of Environmental Quality



303(d) listed waters of the State

Issues:

Total Maximum Daily Loads (TMDLs): DEQ has developed TMDLs to address elevated **temperature**, **bacteria and mercury** levels throughout the Upper Willamette Subbasin. TMDLs have also been developed to address low **dissolved oxygen levels** in Amazon Diversion Channel and Coyote Creek and high **turbidity levels** in the Fern Ridge Reservoir. These TMDLs specify pollutant load reductions and shade levels for Amazon Creek, Amazon Diversion Channel and Coyote Creek.

•Temperature – Waters in the Upper Willamette Subbasin are warmer than is necessary to protect salmonid rearing and spawning. Lack of riparian vegetation and impacts from dams and water withdrawals are major contributors to high stream temperatures.

•Bacteria – People can become sick if they ingest water that is contaminated with bacteria when they are swimming, recreating or in contact with the water. Urban and rural/agricultural sources can be major contributors to the high bacteria levels found in many of the rivers in the Upper Willamette.

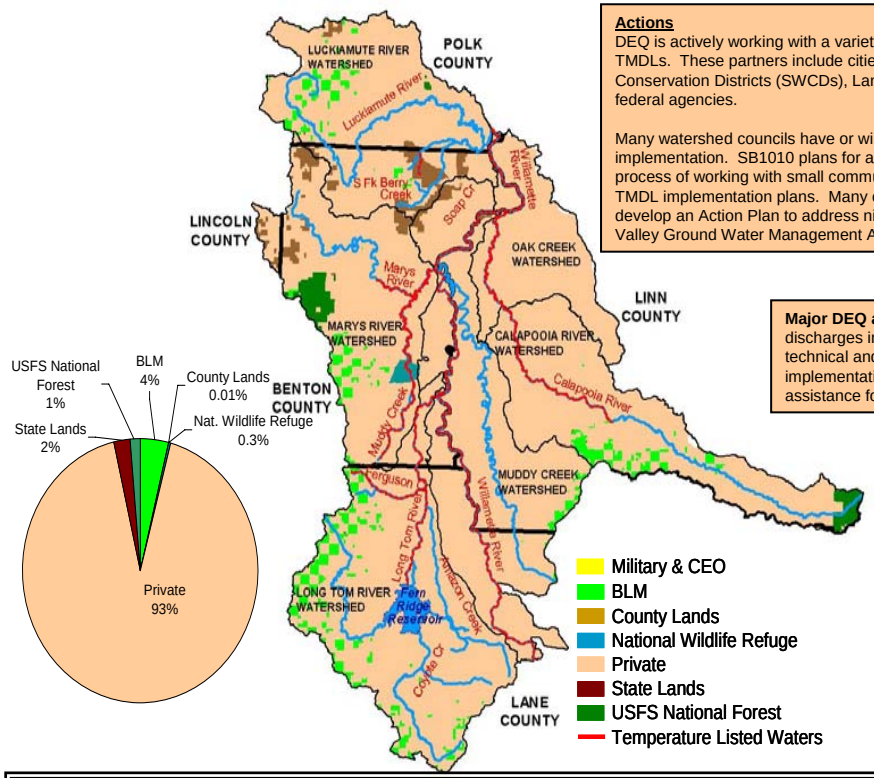
•Mercury – The Willamette River has fish consumption advisories due to elevated levels of mercury found in some fish species. The Upper Willamette Subbasin will be addressed as part of a basin-wide strategy for mercury. General sources include air deposition and erosion of soils which contain mercury from natural and anthropogenic sources.

303(d) List and Pollutants of Concern: Additional parameters and streams have been added to the State's list of impaired waterbodies (known as the 303(d) list) for the Upper Willamette Subbasin which are not addressed by this TMDL. These pollutants include dissolved oxygen and toxins (such as arsenic, lead and several others). DEQ will address these pollutants in future updates of the TMDL. Other concerns in the watershed include sedimentation and loss of fish habitat.

Contact information

For more information on DEQ's work in the Upper Willamette Subbasin please contact: Jared Rubin in Eugene (541-687-7437) or visit the DEQ's webpage at: http://www.deq.state.or.us/wq/Willamette/WRBHome.htm

[Last Updated: September 2006]



Actions
DEQ is actively working with a variety of partners on the implementation of the Willamette TMDLs. These partners include cities, counties, Watershed Councils, Soil and Water Conservation Districts (SWCDs), Lane Council of Governments (LCOG), and state and federal agencies.

Many watershed councils have or will develop their watershed plans and have started on implementation. SB1010 plans for agricultural lands have been developed. LCOG is in the process of working with small communities to assist them with the development of their TMDL implementation plans. Many of these partners are also involved in the effort to develop an Action Plan to address nitrate in the groundwater in the Southern Willamette Valley Ground Water Management Area.

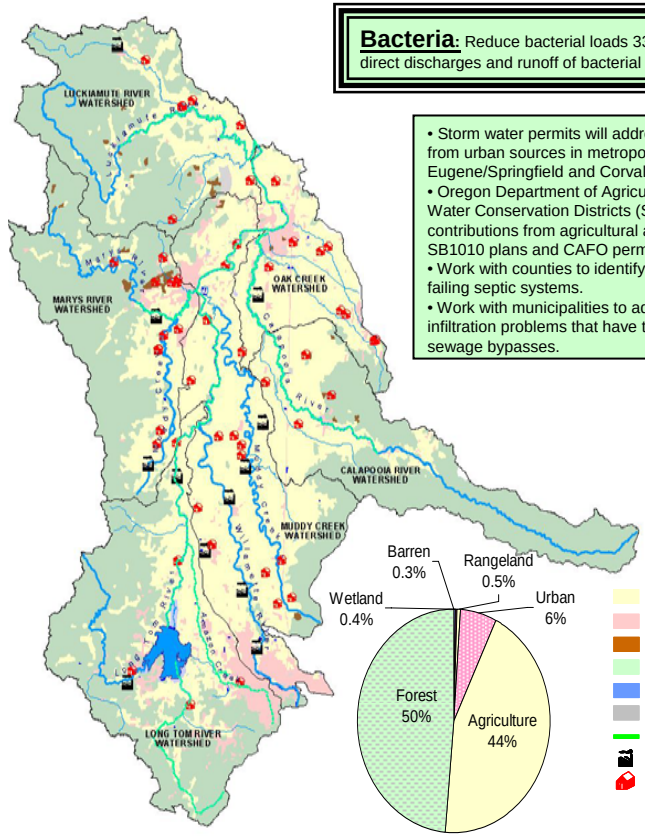
Major DEQ activities include: NPDES permitting of wastewater discharges including stormwater from the Eugene/Springfield area; technical and financial assistance for source identification and implementation activities; cleanup activities; and technical assistance for volunteer monitoring efforts.

Toxics: A 27% reduction in the load of total mercury is needed in the Willamette Basin.

Mercury will be addressed on a basin-wide scale in the Willamette.
- Certain municipalities and industrial facilities will conduct monitoring for mercury and will be asked to develop mercury minimization plans
- DEQ will further characterize the load of mercury from major tributaries to the mainstem Willamette.
- Additional erosion and stormwater control measures will be implemented to reduce the runoff and erosion of native mercury-containing soils to streams.

Bacteria: Reduce bacterial loads 33-84% by addressing direct discharges and runoff of bacterial sources.

- Storm water permits will address bacteria contributions from urban sources in metropolitan areas such as Eugene/Springfield and Corvallis.
- Oregon Department of Agriculture (ODA) and Soil and Water Conservation Districts (SWCDs) will address contributions from agricultural and rural lands under SB1010 plans and CAFO permits.
- Work with counties to identify and address areas with failing septic systems.
- Work with municipalities to address inflow and infiltration problems that have the potential to cause sewage bypasses.



Temperature: Reductions in stream temperature can be achieved by reducing solar radiation loading by planting vegetation to increase stream-side shading as well as by improving base flow.

Resources are available for assisting partners with temperature improvement and habitat restoration projects:
- Implementation plans have been developed by ODA and SWCDs (SB1010 plan) and watershed councils.
- Loans and grants are available to help municipalities, watershed councils and SWCDs fund projects.