LPRO: Legislative Policy and Research Office

WATER QUALITY

BACKGROUND BRIEF

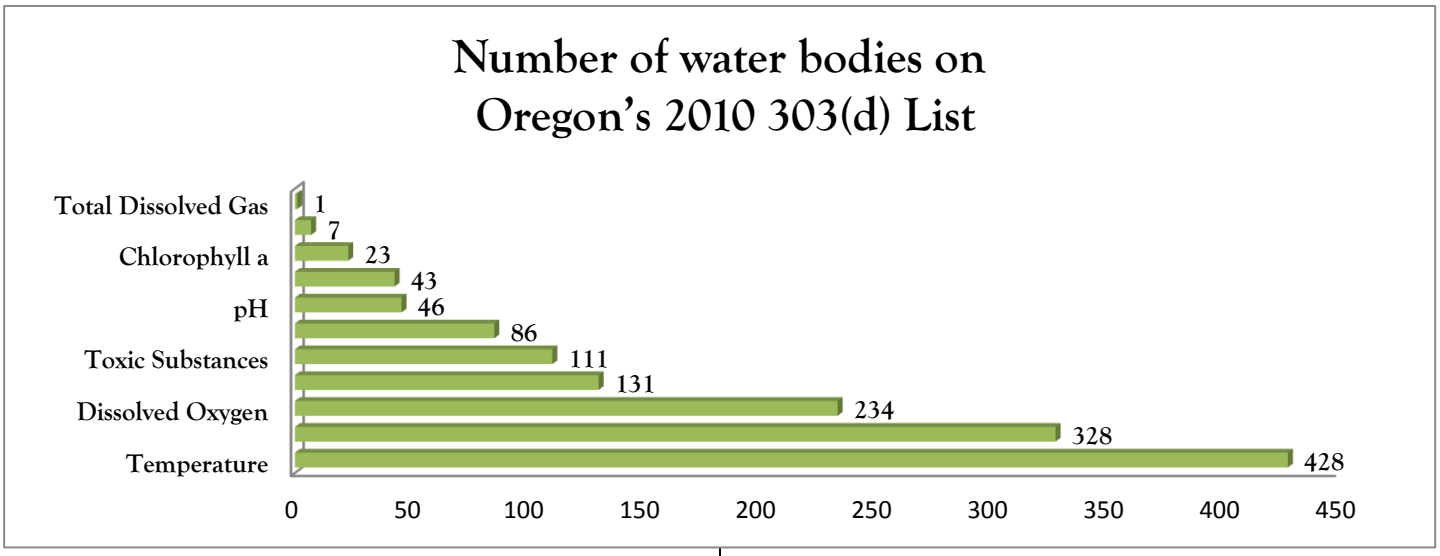
The federal Environmental Protection Agency **(EPA)** has delegated authority to the Department of Environmental Quality **(DEQ)** to operate the federal Clean Water Act **(CWA)** in Oregon. The EPA has oversight authority over how DEQ carries out the Act. The EPA also has separate enforcement authority under the CWA. DEQ is responsible for protecting Oregons rivers, lakes, streams and groundwater to keep these waters safe for a wide range of uses, such as drinking water, recreation, fish habitat, aquatic life and irrigation. DEQ's Water Quality Program accomplishes this by developing clean water standards for Oregon's waters:

- Monitoring water quality with regular sampling of more than 100 rivers and streams in 18 designated river basins in Oregon;
- Regulating sewage treatment systems and industrial dischargers through permits that set limits on pollutants discharged;
- Assessing the water quality conditions in all Oregon waters;
- Developing and implementing clean water plans ("Total Maximum Daily Loads") for rivers and streams that do not meet clean water standards;
- Inspecting septic system installations and working with local agencies to ensure consistency around the state;
- Helping public drinking water systems implement plans to protect drinking water;
- Offering low-cost loans to public agencies and grants to different entities to help fund improvements to water quality; and
- Providing grants and technical assistance to reduce pollution from surface water runoff (also called "nonpoint source" pollution).

CONTENTS

CLEAN WATER STANDARDS

Clean water standards are the foundation of DEQ's water quality program. Standards establish water quality goals by designating beneficial uses for each water body and setting criteria to protect those uses. Beneficial uses include public water supply, fish and aquatic life, recreation, irrigation and more.



INTEGRATED REPORT AND 303(D) LIST

Every two years, DEQ is required to assess water quality and report to the EPA on the condition of Oregon's waters. DEQ prepares an Integrated Report that meets the requirements of the CWA for Sections 305(b) and 303(d). CWA Section 305(b) requires a report on the overall condition of Oregon's waters. Section 303(d) of the CWA requires states to develop a list of water bodies that do not meet the state's clean water standards. The list is part of a periodic report on water quality throughout the state. DEQ compares data and information from a variety of sources against Oregon's water quality standards to determine which water bodies should be listed as impaired. DEQ must prioritize the list and submit it to the EPA for approval.

The last list approved by the EPA was the 2010 303(d) list. In November 2014, DEQ submitted the 2012 Integrated Report and 303(d) list to the EPA for approval. The submitted list included a total of 1,087 out of approximately 37,600 water bodies in Oregon (3 percent) on the 303(d) list for one or more pollutants. DEQ is waiting for the EPA to take action to approve or disapprove the 2012 303(d) list.

TOTAL MAXIMUM DAILY LOADS

Once a waterbody is placed on the 303(d) list, the CWA requires states to develop a plan to meet clean water standards. This plan is called a Total Maximum Daily Load (**TMDL**), which describes the maximum amount of pollutants from municipal, industrial, commercial and surface runoff sources that can enter waterways without violating clean water standards.

Implementing a TMDL often includes revising industrial and municipal wastewater permits to incorporate revised permit limits. On agricultural lands, implementation plans are developed through the Oregon Department of Agriculture's (**ODA**) process under Senate Bill 1010 (1993). On state and private forestlands, the Oregon Department of Forestry (**ODF**) has the lead in providing water quality protection through the Oregon Forest Practices Act and long range management plans. In urban areas, local governments take the lead in developing TMDL implementation plans. The U.S. Forest Service and the Bureau of Land Management (**BLM**) are responsible for

developing water quality restoration plans for lands under their jurisdiction.

Under most circumstances, TMDL implementation plans for improved water quality rely on cooperation among designated management agencies, landowners and land managers within a river basin. Local watershed councils, Soil and Water Conservation Districts or other organizations serve as community-based coordination points for these united efforts. TMDL implementation plans describe actions that will be taken to reduce pollution.

INDUSTRIAL/DOMESTIC WASTEWATER PERMITTING

DEQ's wastewater management program regulates and minimizes adverse impacts of pollution on Oregon's waters from point sources of pollution. The term "point source" generally refers to wastewater discharged into water or onto lands through a pipe or a discernible channel. These point sources operate under the terms of a federal National Pollutant Discharge Elimination System **(NPDES)** or state Water Pollution Control Facilities **(WPCF)** wastewater discharge permit issued by DEQ. DEQ currently manages over 5,800 federal and state water quality permits. Point sources requiring a NPDES permit include wastewater treatment plants, various industries such as pulp and paper plants and food processors, as well as municipal stormwater systems for Oregon's larger urban areas. In addition, construction sites disturbing more than one acre of land and certain types of industrial facilities are required to have a NPDES permit for stormwater runoff.

OREGON WATER QUALITY INDEX

To assess the overall water quality of Oregon's rivers, DEQ monitors 131 ambient water quality river sites throughout the state six times a year and summarizes these findings using the Oregon Water Quality Index **(OWQI)**. These sites include major rivers and streams throughout the state and are intended to be representative of statewide geography and land use. In 2015, 48 percent of river sites monitored had good or excellent water quality status. Over the previous ten years, 21 percent of the sites had improving trends, 6 percent had declining trends and 73 percent had non-changing trends. The OWQI is just one of several tools that helps DEQ get a better understanding of Oregon's water quality. It includes water quality variables such as dissolved oxygen, biochemical oxygen demand **(BOD)**, pH, total solids, nitrogen, phosphorus, temperature and bacteria. However, the index does not account for toxic contaminants, habitat conditions or biological community health, and therefore does not identify all potential water quality issues in a watershed.

AGRICULTURAL WATER QUALITY MANAGEMENT

Oregon's Agricultural Water Quality Management Program **(AgWQMP)** is administered by ODA. AgWQMP's purpose is to prevent and control water pollution from agricultural activities and soil erosion, and help achieve water quality standards by focusing on landscape conditions that provide the functions for healthy watersheds. The landscape-based approach provides landowners with clarity about their responsibilities and focuses on parameters

within landowners' control. The program requires farmers and ranchers to meet agricultural water quality regulations, but provides many options in how individuals manage their farms and ranches to provide the outcomes necessary to prevent and control pollution. ODA relies on Soil and Water Conservation Districts to implement AgWQMP through on-the-ground project work.

WATER QUALITY PROTECTION ON FORESTLANDS

The Oregon Board of Forestry **(Board)** adopts water protection rules that describe best management practices **(BMPs)** for forest operations on nonfederal forestlands to ensure nonpoint source discharges of pollutants from forest operations do not impair the water quality standards. These rules are implemented and enforced by ODF and monitored to assure their effectiveness. On federal forestlands, DEQ enters into Memoranda of Understanding with the U.S. Forest Service and BLM for managing and controlling nonpoint sources of water pollution. These agreements are periodically reviewed and adjusted as necessary to meet water quality standards.

RECENT LEGISLATION

Several water quality-related issues were topics of discussion or measures introduced during the recent legislative sessions.

SUCTION DREDGE MINING

Concerns over environmental impacts and social conflicts related to suction dredge mining activity led to the adoption of Senate Bill 838 in 2013. The measure imposed a moratorium on motorized mining for gold, silver and other precious metals that went into effect on January 2, 2016 and lasts until January 2, 2021. The moratorium does not prohibit all motorized placer mining for precious metals, but it establishes certain restrictions and prohibitions. Both the moratorium and the overall regulation of placer mining were topics of discussion during more recent legislative sessions (SB 830 in 2015; SB 1530 in 2016), but no measures made it through the legislative process. Several state agencies have regulatory authority over various aspects of suction dredge mining activities, including DEQ.

LOW-COST LOANS FOR REPAIRING SEPTIC SYSTEMS

Senate Bill 1563 (2016) appropriated $250,000 to DEQ to award a grant to a third-party lender to develop and implement a loan program for repairing, replacing and upgrading onsite septic systems. The measure directs DEQ to award the grant by September 1, 2016.

WATER QUALITY PERMIT FEES

The Environmental Quality Commission **(EQC)** has the authority, not more than once each calendar year, to increase water quality permit fees in an amount not to exceed the anticipated increase in the cost of administering the permit program or three percent, whichever is less. House Bill 3522 (2015) authorized EQC to increase water permit fees beyond this statutory limitation if the larger increase is provided for in DEQ's legislatively approved budget. The measure provides a mechanism for additional funding to DEQ's wastewater program.

WATER QUALITY ASSESSMENT

Senate Bill 829 (2015) requires DEQ to take certain actions, including independent scientific review and an opportunity for public

comment, when developing or selecting among methodologies to assess the state's waters pursuant to sections 303(d) and 305(b) of the federal CWA. DEQ applies water quality standards to assess whether the quality of Oregon's rivers and lakes is adequate for fish and other aquatic life, recreation, drinking, agriculture, industry and other uses. DEQ also uses the standards as a regulatory tool to prevent pollution of the state's waters.

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