



State of Oregon Department of Environmental Quality

Draft Fiscal Impact Statement

Temperature Total Maximum Daily Load Replacements

Lower Columbia-Sandy Subbasin

Feb. 22, 2023

Introduction

Consistent with Oregon Revised Statute 468B.110 and OAR chapter 340 division 42, DEQ invites input on the proposed draft Total Maximum Daily Load and Water Quality Management Plan fiscal impact statement for the Lower Columbia-Sandy Subbasin to address temperature impairments. The TMDL and WQMP will be proposed for adoption by Oregon's Environmental Quality Commission, by reference, into OAR 340-042-0090.

A TMDL, or clean water plan, is a science-based approach to cleaning up polluted water so that it meets state water quality standards. A TMDL is a numerical value that represents the highest amount of a pollutant a surface water body can receive and still meet the standards. A WQMP is the required element of a TMDL describing strategies to achieve allocations identified in the TMDL to attain water quality standards. Responsible persons, including Designated Management Agencies, are required to implement the TMDL and must develop sector-specific or source-specific TMDL implementation plans. Implementation plans include management strategies, timelines for implementation, a schedule for achieving milestones, and a performance monitoring component with a plan for periodic review and plan revisions.

Fee analysis

This rulemaking does not involve fees.

Reason for rulemaking

DEQ will revise multiple temperature TMDLs that were issued by DEQ and approved by EPA between 2004 and 2010. DEQ is under a court order to update and replace these temperature TMDLs to make them consistent with the current temperature standards. These TMDLs must be updated because they were based, in part on the Natural Conditions Criterion, a section of the temperature standard that was subject to litigation and has since been disapproved by EPA. The court order identifies the schedule for EPA approval or disapproval of the replacement TMDLs. This temperature TMDL replacement project is for the Lower Columbia-Sandy Subbasin and replaces the current Sandy Subbasin 2005 temperature TMDL to be consistent with the current temperature standards.

Information about the Temperature TMDL Replacement project and the Lower Columbia-Sandy Subbasin project area is online.

- Temperature TMDL Replacement project
<https://www.oregon.gov/deq/wq/tmdls/Pages/tmdreplacement.aspx>
- Lower Columbia-Sandy Subbasin
<https://www.oregon.gov/deq/wq/tmdls/Pages/tmdlRlc-sandy.aspx>

Statement of fiscal and economic impact

Fiscal and economic impact overview

Issuance and subsequent implementation for the proposed TMDL and WQMP may have fiscal or economic impacts on businesses, farms and ranches, forestlands, and federal, state, county, and city lands or operations in the Lower Columbia-Sandy River Subbasin. DEQ is not able to quantify costs, but generally, the costs of meeting the biologically based water quality criteria for temperature, and associated TMDL load and wasteload allocations will be minimal for those responsible persons, including Designated Management Agencies that have been implementing existing TMDLs for temperature. Requirements in the WQMP that existing DMAs have not previously implemented may result in additional costs. New DMAs that will be required to develop plans will likely incur costs to develop and implement a plan, report annually, and conduct a review every five years, according to the requirements in the WQMP.

This fiscal impact statement does not quantify the costs of on-going water quality impairment to beneficial uses of waters of the state, nor the potential economic or ecosystem service benefits of improving water quality and attaining beneficial uses. Implementation of these TMDLs is intended to address water pollution, as required by the relevant sections of the federal Clean Water Act. The negative economic and ecological impacts of thermal water pollution potentially affect all those who live, work, and recreate within the watershed, as well as those downstream, including commercial, recreational and subsistence fishing communities. The externalized costs of thermal pollution in water may disproportionately negatively affect poor, rural, indigenous and minority communities in Oregon.

Direct economic costs of TMDL implementation are borne only by those entities contributing pollutants to waterways. These costs can be reduced by these entities by choosing pollutant control or reduction strategies or options that align with their circumstance, perspective, or business needs. The potential economic and ecosystem service benefits of improved water quality and beneficial use access may be realized by all those who live, work, and recreate within and downstream of the Lower Columbia-Sandy Subbasin.

The Lower Columbia-Sandy Subbasin TMDL applies to individual and general permit holders. The degree to which these permits are affected by this TMDL will depend on whether they can meet wasteload allocations for temperature.

Statement of cost of compliance

Costs of compliance with this TMDL rule can include administrative and implementation costs. DEQ does not have specific information for potentially affected operations within the watershed to determine economic impacts to landowners, public agencies, or business operators. DEQ expects costs of compliance to vary for one or more of the following reasons:

- Whether the responsible person, including DMAs are already implementing a temperature TMDL, or they are a new DMA.
- Strategies may already be in place in some locations that prevent or reduce exceedances of temperature water quality standards.
- Costs vary to implement different temperature control strategies in the WQMP.
- Multiple temperature pollution controls may be needed at some locations.
- The presence of buildings or transportation infrastructure may preclude the ability to implement temperature control strategies in some locations.
- DEQ does not have information to determine all potential sources or what actions are currently occurring that could be modified or enhanced to prevent exceedances of temperature criteria.
- Temperature load allocations are calculated by source sector, not individual property or activity.
- A range of organizational capacity and funding exists for implementation plan development and there are varying levels of complexity needed in plans.

The fiscal impact of the new waste load allocations (WLAs) on point source discharge will be variable. In the event the WLA becomes more stringent, the point source may be required to achieve compliance through alternative treatment methods that will require significant funding for capital improvements.

Where investments are necessary to meet TMDL targets and implementation requirements, DEQ identifies funding resources in the WQMP and online that include, but are not limited, to state and federal grants (including Oregon Watershed Enhancement Board and Clean Water Act Section 319 nonpoint source implementation grants) and below-market interest rate loans (that can include principal forgiveness) through the Clean Water State Revolving Fund program. Other state and federal opportunities are provided on [DEQ's water quality funding resource web page](#).

- EPA's funding resources for watershed protection and restoration web page <https://www.epa.gov/nps/funding-resources-watershed-protection-and-restoration>
- EPA's Clean Water State Revolving Fund Best Practices Guide for Financing Nonpoint Source Solutions web page epa.gov/system/files/documents/2021-12/cwsrf-nps-best-practices-guide.pdf

Federal agencies

The proposed rule will have an impact on federal agencies named in the TMDL. The federal Clean Water Act requires states, or the U.S. Environmental Protection Agency, to develop a TMDL for each water body on the state's polluted waters list, also known as the 303(d) list. The TMDL process is one strategy used to clean up polluted waters. Costs by federal agencies for TMDL implementation may be required for compliance with DEQ's federal Clean Water Act requirement to issue a TMDL. Federal agencies will be assigned responsibility for revising existing TMDL implementation plans or for developing a new TMDL implementation plan. DEQ does not know the exact costs for the previously described reasons above.

U.S. Forest Service is responsible for developing plans for management strategies and implementing and reporting on practices to achieve nonpoint source pollutant load allocations on lands owned or managed by the federal government. The Forest Service's jurisdiction makes up approximately 69 percent of the land area within the Lower Columbia-Sandy Subbasin. The Forest Service's current Resource Management Plan dictates how riparian reserves are managed. The Forest Service will incur administrative costs for development of a TMDL implementation plan and reporting costs associated with this TMDL.

U.S. Bureau of Land Management (BLM) is responsible for developing plans for management strategies and implementing practices to achieve nonpoint source pollutant load allocations on lands owned or managed by the federal government, which makes up approximately 4.5 percent of the land area within the Lower Columbia-Sandy Subbasin. The BLM's current Resource Management Plans dictate how riparian reserves are managed. Administrative costs for implementing these existing rules and programs are not dependent on TMDLs, but BLM will incur administrative costs for development and reporting on a TMDL implementation plan.

State agencies

Under the proposed rule, some state agencies will be assigned responsibility for developing TMDL implementation plans and implementing management strategies to achieve cumulative pollutant load reductions, specified in the draft TMDL and WQMP.

Oregon Department of Environmental Quality implements pollutant waste load allocations through National Pollutant Discharge Elimination System permits. The proposed rule will have an impact on DEQ through ongoing work to ensure elements of the TMDL are adopted into regulatory documents such as permits, or TMDL implementation plans to achieve water quality standards and to ensure permits and plans are implemented. Because allocations are applied in permits upon evaluation for renewal or new applications, this does not represent additional fiscal impact to DEQ for the draft TMDL implementation.

Oregon Department of Forestry may be responsible for developing plans for management strategies of forest lands and overseeing implementation of the state Forest Practices Act rules to achieve nonpoint source pollutant load allocations, and to meet water quality standards on non-federal forestlands (state, county, and private), which make up approximately 13 percent of the land area within the Lower Columbia-Sandy Subbasin. ODF maintains the standards within the basin, performs annual reporting, and participates in monitoring and progress reviews. ODF state

statutes and rules include a mix of existing practices, programs and voluntary measures that are promoted to landowners and other partners for restoration activities to improve or protect water quality, land condition and aquatic habitat on non-federal forestlands. ODF's administrative costs for implementing existing rules and programs are not dependent solely on meeting TMDL requirements, but ODF may incur administrative costs for development of a TMDL implementation plan. Financial incentives and technical assistance programs are available to assist private forest landowners or operators to support implementation of assessment, pollution controls, watershed restoration activities or land condition improvements that may be necessary to meet TMDL requirements.

Oregon Department of Agriculture may be responsible for developing management plans for implementation of practices to achieve nonpoint source pollutant load allocations, meet water quality standards on private lands for agricultural activities within the watershed, annual reporting, and to participate in monitoring and periodic progress reviews. ODA's jurisdiction includes approximately 4 percent of the land area within the Lower Columbia-Sandy Subbasin. ODA state statutes and rules are a mix of existing regulatory programs and voluntary measures used for implementation to improve or protect water quality and land conditions on agricultural lands or related to agricultural activities. ODA does this work in partnership with local Soil Water Conservation Districts and Local Advisory Committees. ODA's administrative costs for implementing existing rules and programs are not dependent solely on meeting TMDL requirements, but ODA may incur administrative costs for development and reporting on a TMDL implementation plan. Financial incentives and technical assistance programs are available to assist private landowners. Grant and low interest loan funding is available to ODA, Soil Water Conservation Districts, and individual landowners or operators to support implementation of assessment, pollution controls, and watershed restoration actions or land condition improvements that may be necessary to meet TMDL requirements.

Oregon Department of Transportation is responsible for implementing practices to achieve pollutant allocations related to highways within the subbasin. ODOT jurisdiction includes less than one percent of the land area within the Lower Columbia-Sandy Subbasin. ODOT is required to comply with its DEQ-issued Municipal Stormwater Permit, including development of a statewide TMDL implementation plan. The plan must include practices to achieve Lower Columbia-Sandy Subbasin temperature TMDL allocations related to stormwater discharges and nonpoint sources of excess solar radiation.

Oregon Parks and Recreation Department is responsible for implementing practices to achieve pollutant allocations related to state park lands within the subbasin. OPRD jurisdiction includes less than one percent of the land area within the Lower Columbia-Sandy Subbasin. OPRD will incur administrative costs for development of a TMDL implementation plan, if required, and reporting costs associated with this TMDL.

Oregon Department of Fish and Wildlife is responsible for implementing practices to achieve pollutant allocations related to lands managed by ODFW within the subbasin. ODFW jurisdiction includes less than one percent of the land area within the Lower Columbia-Sandy Subbasin. ODFW will incur administrative costs for development of a TMDL implementation plan, if required, and reporting costs associated with this TMDL.

Local governments

Clackamas and Multnomah counties are responsible for developing or revising plans and implementing practices to achieve pollutant load allocations for rural residential planning and development, building code administration and enforcement, onsite septic system permitting and compliance and operation of the county transportation systems within the subbasin. The counties may incur administrative costs for development or revision of a TMDL implementation plan.

The cities of Portland, Gresham, Troutdale, and Sandy are responsible for developing or revising implementation plans and implementing practices to achieve pollutant allocations related to their permitted municipal separate stormwater sewerage systems, that includes parks and other municipal properties discharging to waterways. The cities may incur administrative costs for development or revision of a TMDL implementation plan.

Financial incentives and technical assistance programs are available to assist local governments and private landowners within cities and counties. Grants or low interest loan funding are available to support implementation of assessment, pollution controls and watershed restoration actions or landscape improvements that may be necessary to meet TMDL requirements.

Public

The proposed rule does not have a direct cost impact to the public. There may be indirect costs to the public if DMA's, such as cities or counties, experience increased costs related to the TMDL that they pass on to the public through increased fees or taxes. The TMDL replacement for temperature will provide a positive impact with potential economic benefits to the public who live, work, and recreate in the watershed. The positive impacts will also expand the ecological benefits of the natural resources in Lower Columbia-Sandy Subbasin. Threatened native populations of salmon, steelhead, rainbow and cutthroat trout, and other aquatic life are culturally and economically significant to the basin. Elevated stream temperatures are a factor in their decline.

The proposed rule supports the Oregon Plan for Salmon and Watersheds¹ mission: "Restoring our native fish populations and the aquatic systems that support them to productive and sustainable levels that will provide substantial environmental, cultural, and economic benefits." The Oregon Plan is a comprehensive partnership between government, communities, private landowners, industry, and citizens funded by the Oregon Legislature. Efforts under the Oregon Plan include regulatory and non-regulatory programs designed to restore native salmon runs, improve water quality, and maintain healthy watersheds and human communities throughout Oregon.

Commercial and recreational fishing is a major driver in the Oregon economy, especially in smaller rural communities. Water quality is a limiting factor that jeopardizes multiple species of

¹ Oregon Plan for Salmon and Watersheds Resources
<https://www.oregon.gov/oweb/resources/pages/opsr.aspx>

threatened and endangered salmonids within the Columbia Basin. The proposed rule supports state and federal conservation or recovery plans to restore or maintain healthy fisheries and will also help to improve beneficial uses. Communities that depend on commercial and recreational salmon fishing for their income may experience a positive economic impact due to the proposed rules if salmonid populations increase.

The statewide economic contribution of recreational anglers to Oregon's economy as of 2018 was \$1.5 billion dollars, supporting 13,120 jobs. It was estimated that 569,600 Oregon recreational anglers spent \$871.8 million in 2018.² The proposed rules may have a positive economic impact on income from recreational anglers if salmonid populations increase. Improvements in recreational salmon fishing may also have a positive economic impact on the public who can use the salmon as a food source.

Large businesses - businesses with more than 50 employees

DEQ evaluated available data from the Oregon Employment Department (2021) and identified approximately 150 large businesses in the basin, including schools, corporations, and agricultural related businesses, among others. The proposed rule could impose costs associated with achieving required reductions in pollutant contributions to waterways from the lands or operations of businesses within riparian areas related to the agriculture and forestry sectors. Specifically, the rule could result in unknown costs for approximately 7 large agricultural related businesses, if they are determined to be located within riparian areas. Starting in July 2023, compliance costs for natural resource protections for industrial forestland owners may be associated with the Forest Practices Act rules, revised in October 2022 due to legislation associated with the Private Forests Accord, rather than this TMDL rule. This may reduce costs associated with implementing this proposed TMDL.

Small businesses – businesses with 50 or fewer employees

DEQ searched the Oregon Employment Department database (2021) list of all businesses registered in Oregon. Small businesses within the counties included in this proposed TMDL were filtered using North American Industry Classification System codes. DEQ identified approximately 4,000 small businesses of various types operating within the Lower Columbia-Sandy Subbasin.

The proposed rule could impose costs associated with achieving required reductions in pollutant contributions to waterways from approximately 92 small agricultural and 8 timber-related businesses, if they are determined to be located within riparian areas. Some small woodlands owners, which are not identified as small businesses in OED's database of businesses in Oregon, within riparian areas could also have costs imposed. The proposed rule is unlikely to result in costs to approximately 3,991 small businesses that are unrelated to agriculture and forestry.

2

<https://www.psc.org/download/333/special-reports/9337/economic-impacts-of-pacific-salmon-fisheries.pdf>

Although the proposed rule does not place specific requirements on small businesses in aggregate, the proposed rule identifies management strategies and practices for the agricultural and forestry sectors that are necessary to reduce pollutant loads. These activities may require changes in certain management practices or improvements in land conditions that could result in capital costs for small landowners. The Oregon Department of Agriculture and the Oregon Department of Forestry have current rules in place that involve a mix of regulatory and voluntary practices by agricultural and forest landowners to protect or improve water quality. In October 2022, ODF updated its rules based on the 2022 Private Forest Accord report and passage of Senate Bills 1501 and 1502 and House Bill 4055 during the 2022 legislative session. ODF's new stream buffer rules begin to take effect in July 2023. The authors of the Private Forest Accord anticipated ODF's new rules would have a greater, but unquantified fiscal impact on small forest landowners. Compliance costs for landowners implementing ODA and ODF rules are generally not dependent on TMDLs, because landowners have to implement existing ODA and ODF water quality rules.

Grant and low interest loan funding are available to support implementation of pollution controls and watershed restoration actions required for compliance with TMDL requirements. The U.S. Dept of Agriculture, Natural Resource Conservation Service³ offers a variety of programs to help farmers, ranchers, family forests, Tribes and conservation partners perform voluntary conservation on private lands funded through the Farm Bill. Small rural landowners and agricultural operators are eligible for NRCS Financial Assistance, grant and cost-share programs that include Environmental Quality Incentives Program, Conservation Innovation Grants, Voluntary Public Access and Habitat Incentives Program, Voluntary Conservation Stewardship Program, Regional Conservation Partnership Program, Conservation Easements, and Agricultural Conservation Easements Program. The Oregon Watershed Enhancement Board offers multiple grant types.

ORS 183.336 Cost of Compliance Effect on Small Businesses

1. Estimated number of small businesses and types of businesses and industries with small businesses subject to proposed rule.

The number of registered small businesses in the Lower Columbia-Sandy Subbasin are approximately 4,091 (OED, 2021), but less than 100 are anticipated to be subject to the rule. Small businesses may or may not be regulated by DMAs that are federal, state, or local government agencies that have legal authority over a sector or source contributing pollutants, identified by DEQ in the proposed TMDL. The number of small businesses that are regulated by DMAs can vary over time.

2. Projected reporting, recordkeeping and other administrative activities, including costs of professional services, required for small businesses to comply with the proposed rule.

The proposed rule does not place specific administrative activities or requirements on small businesses because implementation plan development and annual reporting responsibilities are

³ <https://www.nrcs.usda.gov/wps/portal/nrcs/main/or/programs/>

assigned to state and local governments as DMAs. Therefore, DEQ does not anticipate direct impact of costs to these types to small businesses.

3. Projected equipment, supplies, labor and increased administration required for small businesses to comply with the proposed rule.

Although the proposed rule does not place specific requirements on small businesses in aggregate, the proposed rule identifies management strategies and practices for the agricultural and forestry sectors that are necessary to reduce pollutant loads. These activities may require changes in certain management practices or improvements in land conditions that could result in costs to small agricultural or timber-producing operations. Although compliance costs for implementing ODA and ODF rules are not dependent on TMDLs, addressing the proposed TMDL requirements may require additional supplies, labor, or administration for these businesses, including those that provide in-kind match to publicly funded restoration grants. Some costs may be offset by preventing erosion or improving the productivity of certain agricultural and timber lands through grant funded conservation projects.

4. Describe how DEQ involved small businesses in developing this proposed rule.

DEQ provided notification of this rulemaking using the state opt-in email delivery system called GovDelivery. Small businesses that have signed up to receive DEQ notifications have been made aware of the proposed rule and informational webinar opportunities to ask questions and learn about the draft proposed rule. DEQ will solicit feedback and information from the Rule Advisory Committee regarding potential fiscal impacts to small businesses.

Documents relied on for fiscal and economic impact

The requirement to list the documents relied on to determine fiscal impact is separate from and in addition to the similar list in the rules affected, authorities, supporting documents section above.

Document title	Document location
DEQ’s Oregon Administrative Rules 340-042-0080 Implementing a Total Maximum Daily Load	secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=1459
Economic Impacts of Pacific Salmon Fisheries	psc.org/download/333/special-reports/9337/economic-impacts-of-pacific-salmon-fisheries.pdf
DEQ’s Cost Estimate to Restore Riparian Forest Buffers and Improve Stream Habitat in the Willamette Basin, Oregon (2010)	oregon.gov/deq/wq/Documents/willRipCostRev2.pdf
Oregon Employment Department Small Business database (2021)	Please contact Oregon Employment Department for this information.
Oregon State University - Small Farms Program	smallfarms.oregonstate.edu/

Oregon Department of Forestry-Forest resources: Helping landowners	oregon.gov/odf/working/Pages/helpinglandowners.aspx
Oregon Department of Agriculture - Grants, Loans, and Technical Assistance	oregon.gov/oda/agriculture/Pages/Grants.aspx
Oregon Watershed Enhancement Board (OWEB) - Grant Programs	oregon.gov/oweb/grants/Pages/grant-programs.aspx
Private Forest Accord Report (2022)	oregon.gov/odf/Pages/private-forest-accord.aspx
Resource Management Plans for Western Oregon (U.S. Bureau of Land Management)	eplanning.blm.gov/public_projects/lup/57902/79046/91311/NCO_ROD_RMP_ePlanning.pdf
US Environmental Protection Agency Environmental Justice Screening Tool	epa.gov/sites/production/files/2021-04/documents/ejscreen_technical_document.pdf
US Census Bureau – 2020 Census – Census Tract Reference Map	census.gov/geographies/reference-maps/2020/geo/2020pl-maps/2020-census-tract.html
The U.S. Dept of Agriculture, Natural Resource Conservation Service	nrcs.usda.gov/wps/portal/nrcs/main/or/programs/
NAICS codes	census.gov/naics/

Housing cost

As ORS 183.534 requires, DEQ evaluated whether the proposed rules would have an effect on the development cost of a 6,000-square-foot parcel and construction of a 1,200-square foot detached, single-family dwelling on that parcel. DEQ determined the proposed rules would most likely not have an effect on development costs. If DMAs develop rules or ordinances as part of their TMDL implementation plan, it's possible that additional indirect costs could be passed along in the form of local permit fees. DEQ is unable to quantify the specific impacts of those potential additional costs if they exist to residential or business development costs.

Racial equity

ORS 183.335(2)(a)(F) as amended by House Bill 2993, requires state agencies, when providing notice of a rulemaking, to provide a statement identifying how adoption, amendment or repeal of the proposed rules will affect racial equity in the state.

The proposed rules are expected to have a positive impact on and help promote racial equity, particularly in benefitting Tribal interests. The true externalized costs of water pollution often negatively affect the indigenous, rural, minority and poor communities in Oregon. The proposed rules will help maintain healthy and abundant fisheries including subsistence salmonid fisheries and will also help minimize treatment costs of providing fresh, clean, and healthy water supplies to disadvantaged communities. Tribal nations were made aware of the rulemaking process and invited to consult on the rule advisory committee including, Yakama Nation Fisheries and The Confederated Tribes of Grand Ronde. DEQ will also engage with agricultural, forestry, fishery, and conservation communities through the rule advisory committee.

Environmental justice considerations

ORS 182.545 requires natural resource agencies to consider the effects of their actions on environmental justice issues.

DEQ will use EPA's Environmental Justice Screening Tool to complete a spatial assessment based on the Lower Columbia-Sandy Subbasin demographic data and to determine overburdened communities and the potential effects of the rulemaking. The externalized costs of water pollution can negatively affect poor, rural, indigenous and minority communities in Oregon. The proposed rules will help restore and maintain healthy and abundant fisheries, including salmonid species. Indigenous, rural, minority and poor communities may use salmon as a subsistence food source. Abundant fish would also restore and protect beneficial uses including recreation. The proposed temperature TMDL rule will help address the localized impacts of stream temperature impairments, and potentially improve other related water quality parameters, such as dissolved oxygen.

A potential favorable offset to some of the issues described above will be the current expansion of the 319 grant funding program. The program is being redeveloped to focus on environmental justice. The EPA memorandum "Continued Actions in FY23 to Increase Equity and Environmental Justice in the Nonpoint Source Program" will be used as a tool for DEQ to leverage potential 319 grant funding for overburdened communities. This initiative is currently in development.

Alternative formats

[Español](#) | [한국어](#) | [繁體中文](#) | [Русский](#) | [Tiếng Việt](#) | [العربية](#)

Contact: 800-452-4011 | TTY: 711 | deqinfo@deq.state.or.us

DEQ does not discriminate on the basis of race, color, national origin, disability, age or sex in administration of its programs or activities.

Visit DEQ's [Civil Rights and Environmental Justice page](#).
<https://www.oregon.gov/deq/about-us/Pages/titleVIaccess.aspx>