



State of Oregon Department of Environmental Quality

Draft Fiscal Impact Statement

Upper Yaquina River Watershed Total Maximum Daily Loads for Bacteria and Dissolved Oxygen

Introduction

Consistent with Oregon Revised Statute 468B.110 and OAR chapter 340 division 42, DEQ prepared Total Maximum Daily Loads and a Water Quality Management Plan to address bacteria and dissolved oxygen impairments in the Upper Yaquina River Watershed. The TMDLs and WQMP will be proposed for adoption by Oregon's Environmental Quality Commission, by reference, into OAR 340-042-0090. The TMDLs and WQMP are supported by DEQ's Upper Yaquina River Watershed TMDL Technical Support Document. These draft documents will be available for public review during the comment period and hearing that will precede proposing the rule for adoption by the EQC.

Fee analysis

This rulemaking does not involve fees.

Statement of fiscal and economic impact

Fiscal and Economic Impact

Issuance and subsequent implementation of the proposed TMDLs and WQMP may have fiscal or economic impacts on current and future operators of some: farms and ranches; forestlands; a railroad right-of-way; and federal, state and county lands or operations within the Upper Yaquina River Watershed. However, fiscal or economic impacts and costs of compliance would not be different than if the TMDL was issued as a department order.

This fiscal impact statement does not quantify the costs of on-going water quality impairment to beneficial uses of waters of the state. 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 health impacts of 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 water pollution may disproportionately negatively affect poor, rural, indigenous and minority communities in Oregon.

In contrast, costs of TMDL implementation ~~compliance costs~~ are borne only by those entities contributing sources of pollutants to waterways. These costs can be reduced by these entities by choosing pollutant control or reduction strategies or options that align with their particular circumstance, perspective and/or business needs.

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 particular landowners or business operators. Such impacts are expected to vary by pollutant sources, sizes and locations of activities and affected lands and the extent of any existing and effective, site-specific controls.

Members of the Upper Yaquina TMDL Rule Advisory Committee recommended DEQ use available information to quantify total costs of full implementation of the pollution controls of riparian restoration and livestock access limitations estimated to be needed by the TMDL. In 2010, DEQ estimated costs for riparian restoration in the Willamette Basin, equivalent to standard buffers in the Natural Resources Conservation Service conservation reserve program¹. One RAC member estimated that extrapolating these costs to the Yaquina River Watershed and applying inflation adjustment factor (1.385) to better estimate 2022 costs, yields anticipated costs of approximately \$6500 to \$10,000 per acre for riparian vegetation or fencing². DEQ concluded that these figures represent a reasonable range of riparian restoration costs and notes that individual site costs would range from \$0 to \$10,000 per acre, depending on the existing condition of riparian areas, which may already have adequate pollution controls in place.

DEQ estimated that approximately 160-acres along certain streams in the watershed require restoration to effectively implement the TMDL. Using the \$10,000 per acre figure, DEQ conservatively estimated approximately \$1.60 million will be needed for establishing the needed riparian vegetated buffer. These estimated costs are not distinguishable between public and private investment and costs cannot be refined to a site-specific level (for the reasons listed below).

For each cost of compliance section below, potential fiscal or economic impacts for implementing pollutant controls are highly variable for the following reasons:

- Locations and seasonality of pollution sources and activities can vary from locations and seasonality of bacteria and dissolved oxygen impairments.
- Pollution controls or activities may already be in place in some locations that prevent or reduce exceedances of water quality standards.
- Pollutant control strategies required in the WQMP vary by pollutant and source sector.
- Multiple pollution controls may be needed as some locations.
- The presence of buildings or transportation infrastructure may preclude pollution controls in some locations.
- DEQ does not have exhaustive information to determine all potential sources or what actions are currently occurring that could be modified or enhanced to prevent

¹ DEQ's Cost Estimate to Restore Riparian Forest Buffers and Improve Stream Habitat in the Willamette Basin, Oregon. 2010.

² Lincoln Soil Water Conservation District. Input on Upper Yaquina TMDL Fiscal Impacts Statement. Sep. 26, 2022.

exceedances of water quality standards. Pollutant source assessment and allocations are identified by source sector, not individual property or activity.

- Varying ~~sizes-acreages~~ and locations of pollutant sources and significance of pollutant contributions.
- A range of organizational capacity exists for implementation plan development and there are varying levels of complexity are needed in plans.

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 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 webpage: <https://www.oregon.gov/deq/wq/tmdls/Pages/TMDLs-Funding.aspx>

Members of the Upper Yaquina TMDL Rule Advisory Committee recommended quantifying previous investments in watershed restoration in the Upper Yaquina River Watershed. Over the past two decades, grants from the Oregon Watershed Enhancement Board to the Mid Coast Watersheds Council have been applied in cooperation with, and investments from, agricultural and small woodlot landowners to improve riparian conditions, reduce livestock access to streams and improve instream habitat. In addition, one landowner enrolled 60 acres in the US Department of Agriculture's Conservation Reserve Enhancement Program. Restoration projects can require multiple decades to improve water quality and DEQ does not have current information on the status, success or costs of most restoration projects. However, Oregon Watershed Enhancement Board reports that several funded projects were not fully implemented and a 2021 taxlot-level survey by Oregon Department of Agriculture confirms that some watershed areas do not have proper riparian function. The combination of past or existing riparian improvement or protection projects may offset a portion of the costs of restoring riparian vegetation required by the TMDL.

State and federal agencies

Several state and federal agencies will be assigned responsibility for developing plans and implementing management strategies to achieve cumulative pollutant load reductions, specified in the TMDL and WQMP. Compliance costs are not different for implementing TMDLs issued by department order or TMDLs adopted as rules. Grant and low interest loan funding is available to support implementation of pollution controls and watershed restoration actions required ~~for compliance with~~ to meet TMDL requirements.

DEQ implements pollutant waste load allocations through NPDES permits. Because allocations are applied in permits upon evaluation for renewal or initial applications, this does not represent additional fiscal impact to DEQ for TMDL implementation.

Oregon Department of Forestry is responsible for developing plans for management strategies and overseeing implementation of ~~practices-state~~ Forest Practices Act rules to achieve nonpoint source pollutant load allocations and meet water quality standards on non-

federal forestlands (state, county, and private) within the watershed, perform annual reporting and participate in monitoring and periodic progress reviews. Per ODF authorities described in state statutes and rules, a mix of existing practices, programs and voluntary measures are promoted for implementation to improve or protect water quality, land condition and aquatic habitat on non-federal forestlands. Administrative costs for implementing these existing rules and programs are not dependent on TMDLs, but ODF will incur administrative costs for development of a TMDL implementation plan. Administrative and Compliance implementation costs for ODF and individual forestland owners/operators will be not different for implementing TMDLs issued by department order than TMDLs adopted as rules. Financial incentives and technical assistance programs are available through federal, state and local agencies and organizations to assist private forest landowners/operators to support implementation of site assessment, pollution controls, watershed restoration activities or forest landscape condition improvements that may be necessary ~~for compliance with~~ to meet TMDL requirements.

Oregon Department of Agriculture is responsible for developing plans for management strategies and overseeing implementation of practices to achieve nonpoint source pollutant load allocations and meet water quality standards on private lands for all agricultural activities within the watershed, perform annual reporting and participate in monitoring and periodic progress reviews. Per ODA authorities described in state statutes and rules, a mix of existing ~~practices, regulatory~~ programs and voluntary measures are ~~promoted for implementation on agricultural lands or related to agricultural activities, in partnership with local Soil Water Conservation Districts and Local Advisory Committees,~~ to improve or protect water quality, ~~land condition and~~ aquatic habitat and land condition that impacts water quality on agricultural lands, in partnership with local Soil Water Conservation Districts and Local Advisory Committees. Administrative costs for implementing these existing rules and programs are not dependent on TMDLs, but ODA will incur administrative costs for development of a TMDL implementation plan. Administrative and Compliance implementation costs for ODA and individual landowners/producers are not different for implementing TMDLs issued by department order than TMDLs adopted as rules. Financial incentives and technical assistance programs are available to assist private landowners. Grant and low interest loan funding is available to ODA, SWCDs, and individual landowners/operators to support implementation of assessment, pollution controls and watershed restoration actions or landscape condition improvements that may be necessary ~~for compliance with~~ to meet TMDL requirements.

Oregon Department of Transportation is responsible for implementing practices to achieve pollutant allocations related to highways within the watershed. ODOT is required to comply with its DEQ-issued MS4 stormwater permit, including development of a statewide TMDL implementation plan. The plan must include practices to achieve TMDL allocations related to both stormwater discharges and nonpoint sources of excess solar radiation. Compliance costs are not different for ODOT for implementing TMDLs issued by department order than TMDLs adopted as rules.

Oregon Department of State Lands protects and conserves state waterways and wetlands through administration of Oregon's Removal-Fill Law, Scenic Waterways Law and the

Wetland Conservation Program. DSL will not incur additional ~~costs for administrative or~~ compliance costs in administering its aquatic resource management programs.

~~Oregon Department of Fish and Wildlife is charged by statute to protect and propagate fish and to manage wildlife in the state. ODFW will not incur additional costs for compliance with administering its fish and wildlife management programs. Development of a TMDL implementation plan will incur certain short-term administrative costs. However, DEQ concluded that most implementation strategies are covered under existing plans, including the Oregon Coast Coho Conservation Plan (2007).~~

US Bureau of Land Management is responsible for developing plans for management strategies and implementing practices to achieve nonpoint source pollutant load allocations on forest land owned by the federal government, which makes up approximately one percent of the land area within the watershed. [The BLM's current Resource Management Plan dictates 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 of a TMDL implementation plan.](#) ~~Compliance~~ These costs are not different for implementing TMDLs issued by department order than TMDLs adopted as rules.

Local governments

Lincoln and Benton counties are responsible for developing 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 watershed. [The counties will incur administrative costs for development of a TMDL implementation plan. Administrative and implementation](#) ~~Compliance~~ costs are not different for these entities for implementing TMDLs issued by department order than TMDLs adopted as rules. Financial incentives and technical assistance programs are available to assist local governments and private landowners. Grant 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 ~~for compliance with to meet~~ TMDL requirements.

Public

The proposed rule does not have a direct economic cost to the public at large. As a result of the proposed rule, DEQ expects that currently impaired beneficial uses of waters in the Upper Yaquina River Watershed will be restored. These improvements would provide an overall positive direct economic impact to the public who live, work and recreate in the watershed.

The proposed rule supports the Oregon Plan 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. TMDLs are the primary regulatory approach to addressing water bodies that do not meet water quality standards.

Commercial and recreational fishing is a major driver in the Oregon economy, especially in smaller rural communities. Water quality is a limiting factor that imperils the Yaquina population of Oregon coastal coho, which is significant in the culture and employment of the Oregon central coast that is severely depleted³. The proposed rules support state and federal conservation or recovery plans to restore or maintain healthy fisheries and will also help improve water contact recreation and livestock watering opportunities. Small Oregon coastal communities downstream of the watershed, which once relied heavily on commercial 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 2018.⁴ 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.

Commercial salmon fishing generates thousands of jobs in smaller coastal Pacific Northwest communities. The Oregon Department of Fish and Wildlife, estimates that Oregon's coastal commercial salmon fisheries generated an average of 396,728 landed pounds of salmon from 2010-2017 in its multiple coastal ports, an average of approximately \$2,073,481. This was estimated to have created more than \$5,000,000 in net economic impacts to Oregon's coastal communities through commerce.⁵

Large businesses - businesses with more than 50 employees

The large businesses that operate within the watershed are private industrial timber companies and one railroad company. These entities do not have captive locations in the watershed with greater than 50 employees but manage significant tracts of land and/or operate extensive transportation networks. The rule could impose costs associated with achieving required reductions in pollutant contributions to waterways from these lands or operations. Within several years, ~~the majority of~~ compliance costs for natural resource protections for industrial forestland owners may be associated with ~~F~~forest ~~P~~practices ~~A~~ct rules currently being developed from legislation associated with the Private Forests Accord rather than this rule. ~~Compliance-Administrative and implementation~~ costs ~~for~~ will be

³ Oregon Coastal Coho Conservation Plan. Oregon Department of Fish and Wildlife, in partnership with state and federal natural resource agencies. March 16, 2007.

https://www.dfw.state.or.us/fish/crp/docs/coastal_coho/final/coho_plan.pdf.

⁴ <https://www.psc.org/download/333/special-reports/9337/economic-impacts-of-pacific-salmon-fisheries.pdf>

⁵ https://www.dfw.state.or.us/MRP/docs/Backgrounder_Comm_Fishing.pdf

incurred by the railroad ~~are estimated to be administrative (for~~ implementation plan development, ~~and~~ periodic reporting) and periodic assessment of riparian conditions in the railroad right-of-way. DEQ does not anticipate different economic impacts to any large businesses as a result of the rule, compared to costs for implementing administration or implementation of TMDLs issued by department order.

Small businesses – businesses with 50 or fewer employees

The rule could impose costs associated with achieving required reductions in pollutant contributions to waterways from five small agricultural and timber-related businesses (non-industrial private forestlands), as well as an unquantified number of small woodlands owners and small livestock and farm operations, which are not identified as small businesses in Oregon's database. The rule could also impose costs on four small businesses unrelated to agriculture and forestry if repairs or upgrades to septic systems are needed.

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. Both Oregon Department of Agriculture and Oregon Department of Forestry have rules in place that require a mix of regulatory and voluntary practices by agricultural and forest landowners to protect or improve water quality. ODF is currently updating 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. The authors of the Private Forest Accord anticipated the new rules would have a greater, but unquantified fiscal impact on small forest landowners. Compliance costs for implementing ODA and ODF rules are not dependent on TMDLs. Some of these costs may be offset by preventing erosion or improving the productivity of certain agricultural and forest lands. However, ~~compliance administrative and~~ implementation costs are not different for implementing TMDLs issued by department order compared to TMDLs adopted as rules. In addition, 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 Service⁶ 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 through, including 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 ~~several multiple grant opportunities~~ types, including Oregon Agricultural Heritage Program grants, the only grant type specific to agricultural lands.

ORS 183.336 Cost of Compliance Effect on Small Businesses

⁶ <https://www.nrcs.usda.gov/wps/portal/nrcs/main/or/programs/>

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

DEQ searched the Oregon Employment Department database (2021) list of all businesses registered in Oregon, using NAICS codes and zip codes for the watershed and nearby. DEQ identified one registered small agricultural business (non-cattle), four registered small timber or logging businesses and four registered small businesses unrelated to forestry or agriculture within the watershed. Based on this review and input from the Upper Yaquina TMDL Rule Advisory Committee, there are small agricultural producers and small woodlot operations that do not appear to be identified as “small businesses” as defined in ORS 183.310, but instead report their farm or forestry income on Schedule D for federal tax reporting.

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 assigned to state and local governments as Designated Management Agencies. Therefore, DEQ does not anticipate any significant costs of 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 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 capital 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 included individual landowners and representatives from agricultural and forestry interest groups on the Rule Advisory Committee to advise DEQ on economic impacts and costs of compliance for small businesses. DEQ also provided rulemaking notice to a statewide list of individuals and organizations interested in TMDLs and nonpoint source actions. These groups included small businesses.

Documents relied on for fiscal and economic impact

Document title	Document location
DEQ's Oregon Administrative Rules 340-042-0080 Implementing a Total Maximum Daily Load	https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=1459
Economic Impacts of Pacific Salmon Fisheries	https://www.psc.org/download/333/special-reports/9337/economic-impacts-of-pacific-salmon-fisheries.pdf
Oregon's Ocean Commercial Fisheries	https://www.dfw.state.or.us/MRP/docs/Backgrounder_Comm_Fishing.pdf
Oregon Coast Coho Conservation Plan for the State of Oregon - Oregon Department of Fish and Wildlife, in partnership with state and federal natural resource agencies	https://www.dfw.state.or.us/fish/crp/docs/coastal_coho/financial/coho_plan.pdf
Natural Resource Conservation Service programs page	https://www.nrcs.usda.gov/wps/portal/nrcs/main/or/programs/
<u>DEQ's Cost Estimate to Restore Riparian Forest Buffers and Improve Stream Habitat in the Willamette Basin, Oregon (2010)</u>	https://www.co.benton.or.us/sites/default/files/fileattachments/community_development/page/2516/willametteripcost030310.pdf
Oregon Employment Department Small Business database (2021)	Note: We are confirming whether this list contains confidential business information or can be released.
Oregon State University - Small Farms Program	https://smallfarms.oregonstate.edu/
Oregon Department of Forestry- Forest resources: Helping landowners	https://www.oregon.gov/odf/working/Pages/helpinglandowners.aspx
Oregon Department of Agriculture - Grants, Loans, and Technical Assistance	https://www.oregon.gov/oda/agriculture/Pages/Grants.aspx
Oregon Watershed Enhancement Board (OWEB) - Grant Programs	https://www.oregon.gov/oweb/grants/Pages/grant-programs.aspx
Private Forest Accord Report (2022)	https://www.oregon.gov/odf/Pages/private-forest-accord.aspx
<u>Resource Management Plans for Western Oregon (U.S. Bureau of Land Management)</u>	https://eplanning.blm.gov/public_projects/lup/57902/79046/91311/NCO_ROD_RMP_ePlanning.pdf
<u>Agricultural Statistics – ODA, USDA Census of Agriculture</u>	https://www.oregon.gov/oda/agriculture/pages/statistics.aspx
<u>Written input from Upper Yaquina TMDL Rule Advisory Committee</u>	<u>Available from DEQ, upon request</u>

Advisory committee fiscal review

DEQ appointed an advisory committee.

As ORS 183.33 requires, DEQ will ask for the committee's recommendations on:

- Whether the proposed rules would have a fiscal or economic impact,
- The extent of the impact, and
- Whether the proposed rules would have a significant adverse impact on small businesses; if so, how DEQ can comply with ORS 183.540 to reduce that impact.

The committee will review the draft fiscal and economic impact statement and its findings will be stated in the approved minutes.

The committee determines if the proposed rules would or would not have a significant adverse impact on small businesses in Oregon.

[To be completed following input after 2nd RAC meeting]

Upper Yaquina TMDL Rule Advisory Committee members provided the following additional information for consideration regarding impacts to small businesses:

- There are many small farms in the watershed that are not registered as small businesses and report farm income on Schedule D of an individual federal income tax return.
- An unquantified number of investments in rural land ownership, land lease agreements or land management contracts in the watershed could also be considered to be small businesses.

If a significant impact is identified by the committee, as ORS 183.333 and 183.540 requires, the committee will consider how DEQ could reduce the rules' fiscal impact on small business. Committee ideas included:

[To be completed following input after 2nd RAC meeting]

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 have no effect on direct or indirect development costs.

Racial Equity

ORS 183.335(2)(a)(F) requires state agencies to provide a statement identifying how adoption of this rule will affect racial equity in this state.

Tribal nations were made aware of the rulemaking process and invited to consult on this matter. Representatives from the Confederated Tribes of the Siletz Indians participated in the local and technical advisory groups convened in 2012 and on the Rule Advisory Committee.

DEQ also engaged extensively with agricultural, forestry, fishery and conservation communities through the local and technical advisory groups convened in 2012 and the Rule Advisory Committee.

The proposed rules are expected to have a positive impact on and help promote racial equity, particularly in benefitting tribal interests. The externalized costs of water pollution often negatively affect poor, rural, indigenous and minority communities in Oregon. The proposed rules will help restore and maintain healthy and abundant fisheries (including subsistence salmonid fisheries common to poor, rural, indigenous and minority communities) and will also restore and protect beneficial uses including water contact recreation and livestock watering.

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.