



**DEPARTMENT OF JUSTICE
GENERAL COUNSEL DIVISION**

MEMORANDUM

DATE: March 2, 2021

TO: Peter Daugherty, State Forester, Department of Forestry
Richard Whitman, Director, Department of Environmental Quality

FROM: Matt DeVore, Assistant Attorney General, Natural Resources Section
Diane Lloyd, Assistant Attorney General, Natural Resources Section

SUBJECT: Authority to Protect Water Quality on Forestlands

Question presented:

What are the respective authorities and obligations of the Environmental Quality Commission and the Board of Forestry for the protection of water quality on forestland? ¹

Short answer:

The Environmental Quality Commission (Commission) is charged with protecting the quality of waters of the state and with administering the federal Clean Water Act (CWA) in Oregon. This responsibility includes establishing water quality standards to protect beneficial uses of waters, issuing permits and certificates that limit water pollution, and (in areas where water quality standards are not met) overseeing development and implementation of plans to further limit pollution from all sources in order to improve water quality so that standards are met in the future. These plans, known as “Total Maximum Daily Loads” or “TMDLs” identify the amounts of pollution that can occur from particular sources in order to achieve water quality standards. If pollution reductions are needed from particular sources in order to improve water quality and meet standards, they are achieved through limits and requirements in permits and certificates (for point sources), and through implementation plans (for non-point sources, such as forest

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operations). To approve TMDLs, the Department of Environmental Quality (DEQ) (or the Commission), and then the federal Environmental Protection Agency (EPA), must conclude that these management actions (carried out through permits and certificates issued by DEQ), and implementation plans (which are normally prepared by other governmental entities and approved by DEQ), are likely to be implemented to achieve water quality standards.

The Board of Forestry (Board) is obligated to establish best management practices and forest practice rules to ensure that, to the maximum extent practicable, nonpoint source discharges of pollutants resulting from forest operations on forestlands do not impair the achievement and maintenance of water quality standards set by the Commission. This obligation includes two elements, first, maintaining the water quality of water bodies that already meet those standards, and second, the implementation of plans (including TMDL implementation plans) to improve the water quality of water bodies that do not meet the standards. In considering forest practice rules, the Board also must make a series of determinations related to the need, effectiveness and impacts of the proposed rules.

Discussion

Environmental Quality Commission and Department of Environmental Quality

The Commission has controlling authority for regulating water pollution.² Under the direction of the Commission, the legislature charged DEQ with taking such actions as are necessary for the prevention of new pollution and the abatement of existing pollution.³ The legislature charged the Commission with the obligation to adopt water quality standards and to take other steps necessary to implement the CWA in Oregon.⁴ Water quality standards, if approved by EPA, have the effect of federal law.⁵ If the EPA does not approve the standards, the EPA must develop and adopt standards that would apply to Oregon's water bodies.⁶

Water quality standards consist of three components: a designated use or uses for the water body, water quality criteria based upon such uses and antidegradation requirements.⁷ One of the designated uses that frequently creates a limiting factor relevant to forestry operations is native cold water dependent aquatic species, such as salmon and trout. Water quality standards include the water quality criteria and policies to protect these designated uses. In the case of temperature, the criteria are made up of numeric and narrative elements, including (a) biologically-based numeric criteria (for example, with temperature, a 7-day average of the daily

² ORS 468B.010.

³ ORS 468B.020(2).

⁴ ORS 468B.048, ORS 468B.035. *See also* Clean Water Act, 33 USC §1251 et seq.

⁵ 33 USC §1313(c)(3).

⁶ 33 USC § 1313(c)(4); 40 CFR § 131.22.

⁷ 40 CFR § 131.3(i), 40 CFR § 131.6.

maximum stream temperature)⁸; and (b) a narrative criterion or criteria (for example, no increase in temperature is allowed that would reasonably be expected to impair cool water species).⁹ The temperature standard also includes an anti-degradation requirement, designed to prevent high-quality waters that meet the biologically-based numeric criteria from being degraded (for example, the protecting cold water standard that limits temperature increases from all sources taken together to 0.3 degrees Celsius).¹⁰

Every two years, DEQ must assess water quality throughout the state and report to the EPA on the condition of Oregon's waters. DEQ prepares an Integrated Report that meets the requirements of CWA sections 305(b) and 303(d). Section 305(b) requires a report on the overall condition of Oregon's waters. Section 303(d) requires DEQ to identify waters that do not meet water quality standards. If a waterbody fails to meet one or more water quality standards, DEQ is required to identify the amounts of pollution coming from different sources, and determine what reductions are necessary in order for the applicable standard to be met. This determination is called a Total Maximum Daily Load (TMDL).¹¹ CWA section 303(d) requires that a TMDL be "established at a level necessary to implement the applicable water quality standard." Federal and state regulations define a TMDL as the sum of the wasteload allocations (allowable pollutant loads from point sources), load allocations (allowable pollutant loads from nonpoint sources), and background."¹² The TMDL identifies the amounts of pollutants that a water body can receive and still meet water quality standards.

Where a pollutant is highly variable or difficult to measure directly, a TMDL may use surrogate measures as an additional means to express allocations.¹³ One example, particularly important for nonpoint sources such as farm and forestry operations, is the use of riparian shade as a surrogate measure for temperature TMDLs. EPA regulations allow TMDLs to be "expressed in terms of either mass per time, toxicity, or other appropriate measure."¹⁴ For TMDLs for water bodies that do not meet temperature standards, DEQ typically determines nonpoint source heat loads by analyzing current shade levels relative to the amount of shade likely to occur without operations impacting shade cover in riparian areas. Under this analysis, DEQ is able to correlate shade levels needed along particular stream segments within sub-basins (fourth order hydrologic units set by the U.S. Geological Service, such as the Imnaha subbasin of the Grande Ronde in eastern Oregon, and the Applegate subbasin of the Rogue basin in western Oregon) in order for biologically-based numeric criteria to be met.¹⁵

⁸ See, e.g. OAR 340-041-0028(4)(a), limiting temperature to 13 degrees Celsius for certain streams at certain times of the year.

⁹ OAR 340-041-0028(9)(a).

¹⁰ OAR 340-041-0028(11).

¹¹ 33 USC § 1313(d); ORS 468B.110.

¹² 40 CFR 130.2(i); OAR 340-042-0040(4)(b).

¹³ OAR 340-042-0040(5)(b).

¹⁴ 40 CFR § 130.2(i).

¹⁵ See Willamette Temperature TMDL, Figure 4.17, p.4-71 and Appendix C, <https://www.oregon.gov/deq/FilterDocs/chpt4temp.pdf>.

TMDLs must be reviewed by EPA for consistency with federal requirements. In order to be approved by EPA the TMDL must be accompanied by a management plan that provides reasonable assurance that, when implemented, it will result in attainment of the relevant water quality standard.¹⁶ When a TMDL is developed for waters impaired by point sources only, the issuance of discharge permits to the point sources provides the reasonable assurance that the wasteload allocations in the TMDL will be achieved because federal regulations require that effluent limits in permits be consistent with wasteload allocations in applicable approved TMDLs.¹⁷ Where a TMDL is developed for waters impaired by both point and nonpoint sources, EPA evaluates whether nonpoint source reductions specified in the TMDL have a “reasonable assurance” of occurring. In its evaluation, EPA considers whether practices capable of reducing the specified nonpoint source pollutant loads: “(1) exist; (2) are technically feasible at a level required to meet allocations; and (3) have a high likelihood of implementation.”¹⁸ EPA’s requirement of reasonable assurance of implementation of load allocations for nonpoint sources was upheld by the United States Third Circuit Court of Appeals.¹⁹ Load allocations for nonpoint source pollution are often broad in nature and can be assigned to types or sectors of nonpoint sources such as all non-federal forest operations in a sub-basin.²⁰

As discussed, DEQ’s TMDLs are not water quality standards, but are the state’s primary plan for achieving the water quality standards in waterbodies where standards are not met.²¹ As noted above, the TMDL wasteload allocations for point sources are implemented through discharge permits issued by DEQ.²² For non-point sources, the TMDL allocations are implemented by designated management agencies (DMAs), such as cities, counties and other government agencies (including ODF for non-federal forestlands), as identified by DEQ in the TMDL.²³ DMAs develop TMDL implementation plans that may contain regulatory measures, non-regulatory measures, or both, and that are subject to review and approval by DEQ.²⁴

For non-federal forestlands, the Commission has adopted a specific TMDL implementation rule. This rule provides that “[n]onpoint source discharges of pollutants from forest operations on state or private lands are subject to best management practices and other control measures established by the Oregon Department of Forestry under * * * ORS 527.610 to 527.992 and according to OAR chapter 629, divisions 600 through 665.”²⁵ However, “[i]n areas where a

¹⁶ *EPA Guidance for Water Quality-based Decisions: The TMDL Process*, p. 24. April 1991.

¹⁷ 40 CFR 122.44(d)(1)(vii)(B).

¹⁸ *See, e.g.*, Environmental Protection Agency, EPA Chesapeake Bay TMDL. Section 7. Reasonable Assurance and Accountability, available at www.epa.gov/sites/production/files/2014-12/documents/cbay_final_tmdl_section_7_final_0.pdf.

¹⁹ *American Farm Bureau Federation vs. United States Environmental Protection Agency*, 792 F3d 281, 300-301 (2015).

²⁰ 40 CFR § 130.2(g).

²¹ 40 CFR § 130.7(c).

²² ORS 468B.050.

²³ ORS 468B.110(1).

²⁴ OAR 340-042-0040(4)(1)(G), OAR 340-042-0080(1).

²⁵ OAR 340-042-0080(2).

TMDL has been approved, site specific rules under the Forest Practices Act rules will need to be revised if [DEQ] determines that the generally applicable Forest Practices Act rules are not adequate to implement the TMDL load allocations.”²⁶ If the Board fails to act following such a determination by DEQ, then DEQ must request that the Commission petition the Board for rule changes.²⁷ If the Commission made such a petition and the Board failed to adopt changes within two years,²⁸ the Commission could adopt by rule and enforce, or DEQ could adopt by order and enforce, source-specific requirements on forest operations in a sub-basin in order to comply with the TMDL requirements of section 303(d) of the federal Clean Water Act and the need to establish “reasonable assurance” of implementation.²⁹

State law provides that neither the Commission nor DEQ may adopt or enforce any effluent limitation upon nonpoint source discharges from forest operations, unless they are required to do so by the provisions of the CWA.³⁰ TMDL load allocations are not effluent limits as that term is defined in the context of the CWA to apply to limits on point source discharges of pollutants in discharge permits.³¹ Additionally, as discussed above, when a water body is not meeting water quality standards a TMDL is required by the CWA and therefore the state law limitation on the adoption of “effluent limitations” cannot be interpreted as a prohibition on adopting load allocations in the context of TMDL development.

Board of Forestry and Department of Forestry

The legislature delegated to the Board the responsibility to “supervise all matters of forest policy and management under the jurisdiction of the state.”³² The legislature provided the Board with exclusive authority to develop and enforce forest practice rules and the obligation to coordinate with other state agencies concerned with the forest environment.³³ The Board must adopt forest practice rules that provide for the overall maintenance of air quality, water resources, soil productivity, and fish and wildlife.³⁴ Specifically as to water quality, the Board must establish best management practices (BMPs) and forest practices rules to ensure that to the maximum extent practicable nonpoint source discharges of pollutants resulting from forest operations on forestlands do not impair the achievement and maintenance of water quality standards established by the Commission.³⁵ To establish best management practices the Board must adopt rules for forest practice that prevent or reduce pollution to waters of the state.³⁶

²⁶ *Id.*

²⁷ *Id.*

²⁸ ORS 527.765(3)(e).

²⁹ ORS 468B.110(1).

³⁰ ORS 468B.110(2).

³¹ 33 USC § 1311; 40 CFR § 122.2.

³² ORS 526.016.

³³ ORS 527.630(3).

³⁴ ORS 527.710(2).

³⁵ ORS 527.765(1).

³⁶ *Id.*

The legislature provided further direction to guide the Board's rulemaking process. When the Board enacts forest practice rules that are not specifically addressed in statute, it must do all of the following:

- Describe the purpose of the rule and the level of protection desired.³⁷
- Determine that there is monitoring or research evidence that documents that degradation of resources is likely.³⁸
- Determine that the proposed rule reflects available scientific information, the results of relevant monitoring and, as appropriate, adequate field evaluation at representative locations in Oregon.³⁹
- Determine that the objectives of the rule are clearly defined.⁴⁰
- Determine that the restrictions placed on forest practices as a result of adoption of the proposed rule:
 - Are to prevent harm or provide benefits to the resource or resource site for which protection is sought,⁴¹ and
 - Are directly related to the objective of the proposed rule and substantially advance its purpose.⁴²
- Determine that the availability, effectiveness and feasibility of alternatives to the proposed rule were considered, and the alternative chosen is the least burdensome while still achieving the desired level of protection.⁴³
- Determine that the benefits to the resource that would be achieved by adopting the rule are in proportion to the degree that existing practices are contributing to the overall resource concern.⁴⁴
- Prepare and make available to the public a comprehensive analysis of the economic impact of the proposed rule.⁴⁵

Current Board rules provide that if the Board determines that forest practices in a watershed are measurably limiting water quality achievement or species maintenance, and the water body in the watershed is either: (a) designated by the Commission as water quality limited, or (b) contains threatened or endangered aquatic species, the Board must appoint an interdisciplinary task force that includes representatives of forest landowners within the watershed and from appropriate state agencies.⁴⁶ The task force must analyze the conditions in the watershed and recommend

³⁷ ORS 527.714, ORS 527.714(4).

³⁸ ORS 527.714(5)(a).

³⁹ ORS 527.714(5)(c).

⁴⁰ ORS 527.714(5)(d).

⁴¹ ORS 527.714(5)(d)(A).

⁴² ORS 527.714(5)(d)(B).

⁴³ ORS 527.714(5)(e).

⁴⁴ ORS 527.714(5)(f).

⁴⁵ ORS 527.714(7).

⁴⁶ OAR 629-635-0120(2).

whether additional watershed-specific protection rules are needed.⁴⁷ The task force should rely on the findings and analysis used by the Commission in establishing the water quality standards and any approved TMDLs for the waterbody.

Forest operations must be conducted in full compliance with the rules and standards of the Commission.⁴⁸ If the operation is conducted in accordance with the Board's rules currently in effect, then an operator shall not be considered in violation of any water quality standard.⁴⁹ This is often referred to as a "BMP shield." The BMP shield can be lost if the Board does not take timely action to review BMPs in response to a petition from the Commission, as described below.⁵⁰

Implementation of Water Protection Measures on Forestlands

As described above, the Board, the Commission, ODF, and DEQ have interconnected roles in protecting Oregon's water quality on forestlands. Broadly speaking, the Commission and DEQ assess waters and establish the water quality standards, while the Board and ODF then establish forest practices to comply with and work towards compliance with those standards. The legislature intended for the two agencies to work collaboratively on their efforts so that each agency brings in its specific perspective and expertise to create a coordinated effort with the goal of protecting water quality and complying with the CWA.

Coordination between the agencies is an ongoing process. This coordination can help to inform the Commission's development of water quality standards, which can include waterbody specific criteria. The Commission establishes water quality standards in rule based on EPA regulations and guidance as well as DEQ's research and analysis.⁵¹ The Board and ODF may assist in the Commission's decisions related to water quality standards and also participate in DEQ's water quality standards revision process.⁵² The Board may also request that the Commission review any water quality standard that affects forest operations on forestlands.⁵³ However, state water quality standards must be reviewed and approved by EPA, so the state's authority in developing standards is limited by what is approvable by EPA.⁵⁴

If a waterbody is meeting the Commission's water quality standards, the Board's obligation is to ensure that forest practices do not impair maintenance of those standards.⁵⁵ If a waterbody is not meeting the Commission's water quality standards, DEQ will establish a TMDL for that

⁴⁷ OAR 629-635-0120(3).

⁴⁸ ORS 527.724.

⁴⁹ ORS 527.770.

⁵⁰ ORS 527.770, 527.765(3)(e).

⁵¹ ORS 468B.048.

⁵² ORS 468B.110; OAR 340-041-0001.

⁵³ ORS 468B.105.

⁵⁴ 33 USC § 1313(c)(3); 40 CFR 131.21.

⁵⁵ ORS 527.765.

waterbody, and determine whether current Board rules and any other measures proposed by ODF are adequate to achieve the pollution reduction required by the TMDL.⁵⁶ The Board and ODF should participate actively in DEQ's development of any TMDL involving state and private forestlands, including sharing data and information prior to and during TMDL development, and by participating in and providing input during DEQ's Local Advisory Group.⁵⁷ Once a TMDL is adopted and approved by EPA, any load allocations for non-federal forestlands and operations included in the TMDL will be binding. The Board is then obligated to implement rules that establish forest practices (which may include voluntary actions as well as regulatory changes) consistent with the TMDL. If DEQ then determines that existing Board rules or any other measures proposed to reduce pollution from these forestry activities (which may include voluntary actions as well as regulatory changes) are inadequate, DEQ will initiate the petition process set forth in ORS 527.765, by asking the Commission to petition the Board to revise its rules to protect water quality on forestlands. This process could lead to the loss of the BMP shield provisions for forest operations if the Board fails to revise the rules within the required time.

If the Board initiates rulemaking to adopt basin-specific water protection rules, it must follow the procedural steps required by forestry statutes, including making the findings required by ORS 527.714. DEQ's determination of a load allocation for non-federal forestlands in a sub-basin would be binding on the Board in establishing an overall target for the Board. However, the Board would retain discretion to determine *how* to achieve that target or outcome. In particular, under ORS 527.714(5)(e), the Board is obligated to choose the alternative practice that is the "least burdensome to landowners * * * while still achieving the desired level of protection." In addition, ORS 527.765(1) requires the Board to establish forest practice rules that meet a "maximum extent practicable" (MEP) standard. The Commission is not under an obligation to consider the burden to the landowners, however, nor is the MEP limitation included in Section 303(d) of the Clean Water Act. For the Board to meet its statutory obligation, it must look beyond the analysis of the Commission and take into account the effect that a particular forest practice would have on landowners. But because TMDL implementation is a requirement of the Clean Water Act, this required analysis does not authorize the Board to change the Commission's determination of water quality standards or TMDL requirements.

In sum, as the Board and Commission work cooperatively to improve water quality in sub-basins that are not currently meeting water quality standards, the Commission is responsible for determining the overall amount of pollution reduction needed on non-federal forestlands, and the Board is responsible for determining how to achieve those reductions. In determining whether current, generally applicable, Board rules are adequate to achieve reductions, the Board, ODF, DEQ and the Commission may also consider non-regulatory measures so long as DEQ can establish that there is a reasonable assurance that the measures, when implemented, will result in attainment of the relevant water quality standard.

⁵⁶ 33 USC § 1313(d); ORS 468B.110.

⁵⁷ ORS 468B.110; OAR 340-042-0050.