

This package contains the following documents:

- Notice of Rulemaking
- Draft Rules Edits Highlighted
- Draft Rules Edits Included (final clean version)

#### **Note for Readers:**

This package contains multiple documents. If you want to read more than one document at a time, you can open multiple copies of this PDF by downloading the PDF and then opening it in Adobe. You can then either:

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- Click on "File" in the top ribbon
- Click on "Open" in the top ribbon
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# Introduction

DEQ invites public input on proposed permanent rule amendments to chapter 340 of the Oregon Administrative Rules.

# **Request for Other Options**

During the public comment period, DEQ asks for public comment on whether there are other options for achieving the rules' substantive goals while reducing the rules' negative economic impact on business.

# **Overview**

The Oregon DEQ is proposing that the Environmental Quality Commission adopt rule amendments to designate Waldo Lake and Crater Lake as Outstanding Resource Waters and to adopt policies to protect these lakes' existing high quality and ecological values from degradation. The proposed rule amendments implement the Outstanding Resource Water policy contained in Oregon's water quality standards rules.

### Short summary of proposed rule changes

The proposed rule amendments identify Waldo and Crater lakes as Outstanding Resource Waters in the antidegradation policy at OAR 340-041-0004(8). The amendments also add a policy to protect the existing high water quality and ecological values of the lakes to the basin specific rules for the Willamette Basin (OAR 340-401-0345) and for the Klamath Basin (OAR 340-401-0185), where the lakes are located. The proposed rules prohibit new or increased permitted discharges and state that other activities must not degrade the current existing water quality. Limited duration activities to respond to emergencies and public welfare, and for long term benefits, such as restoration or enhancement activities, are allowed. Links to the proposed rule amendments may be found in the "Rules Affected" section of this document (page 6).

# Background of reasons for doing this rulemaking

On April 22, 2019, the Northwest Environmental Defense Center petitioned the Oregon Environmental Quality Commission to adopt rules designating Waldo Lake and its associated wetlands as Outstanding Resource Waters of Oregon. The petition also proposed that the commission adopt a policy to protect the current high water quality and exceptional ecological values of Waldo Lake. In July 2019, the commission granted the petition and directed DEQ to initiate the requested rulemaking. The commission also directed DEQ to pursue rulemaking to designate Crater Lake an Outstanding Resource Water.

Outstanding Resource Waters are high quality waters that have extraordinary or unique character or ecological value, or are critical habitat areas, such that they constitute an outstanding state or national resource. The special water quality and ecological values of these waters must then be protected in accordance with Oregon's antidegradation policy [OAR 340-041-0004].

Waldo Lake is located in Lane County, Oregon, high in the Cascade Mountains. It is remote and has exceptionally high water quality. Waldo Lake is classified as an ultra-oligotrophic lake. This is a lake that has low nutrient concentrations and low plant growth. Waldo has outstanding water clarity and low productivity. The basin is entirely on public land in the Willamette National Forest. A large portion of the lake basin is managed as wilderness and semi-primitive non-motorized dispersed recreation. There are three developed campgrounds and one horse camping facility on the lake. Waldo Lake is the headwater source of the North Fork of the Middle Fork Willamette River, which is protected under the federal Wild and Scenic River Act. Protecting Waldo Lake will also help protect the quality of water in this river. Additional information on the lake may be found in the Waldo Lake Outstanding Resource Water Support Document.

Crater Lake, the centerpiece of Oregon's only national park, is unique. Located in a volcanic caldera, Crater Lake is the deepest lake in the United States and is exceptionally clear and pristine. Crater Lake has outstanding water quality and is located in a scenic setting. The lake is important for long-term research and recreation, attracting visitors from around the world, and has cultural significance to Native American tribes. Additional information on Crater Lake may be found in the Crater Lake Outstanding Resource Water Support Document, which may be found at this link: Waldo and Crater Lakes ORW.

### How this rulemaking addresses the reasons for doing the rulemaking

The rulemaking establishes policies to protect the existing high water quality and ecological values of Crater and Waldo lakes within the state's water quality standards. The rules designate the lakes as Outstanding Resource Waters and prohibit discharges that would degrade water quality. The outstanding resource water status is expected to support the efforts of the National Park Service and U.S. Forest Service to protect these lakes' water quality through their lake and watershed management and monitoring programs.

# Key policy and technical issues

1. A key policy issue is how the rule language should address the need to balance public access to the lakes for recreation and tourism with protecting the lakes' high water quality and ecological values, and how to make the intended balance of these values clear in the rule. DEQ's proposed rule language for Crater Lake is intended to recognize that current levels of recreation and tourism activity are part of the baseline and co-exist with the existing high water quality. Therefore, the proposed policy goal is to prevent degradation from the current state due to additional activity or development. It is not DEQ's intent to reduce or remove current recreation and tourism activities, which are themselves one of the exceptional values of these lakes. However, activities should be managed to minimize water quality impacts where possible. Protecting the water quality of these lakes will help maintain the exceptional recreation opportunity they provide.

The proposed rule language for Waldo Lake was submitted by citizen petition and is similar. This language may be revised in response to public comment.

The proposed rules establish the policy goal and prohibit discharges permitted by DEQ under the Clean Water Act that would degrade the existing water quality. The U.S. Forest Service and

National Park Service manage activities on the lakes and in the watersheds to meet water quality standards, including the outstanding resource water rule.

- 2. A key technical issue is whether Waldo and Crater lakes qualify for the outstanding resource designation. DEQ concludes that they do because they are exceptionally clear, pristine lakes that stand out among other lakes in the state and in the region. Both lakes provide unique opportunities for research and outdoor recreation. Supporting information for these conclusions is provided in the support documents. Links to these documents are provided in the Supporting Documents section below.
- 3. Another key technical issue is how to determine whether a new or expanded activity would be expected to impact water quality. DEQ proposes stating the policy goal and allowing the Park Service and Forest Service to use data and professional judgment to make such decisions through their management planning processes. In some cases it can be difficult to understand whether a water quality change is the result of a new or expanded activity as opposed to another influence, such as climate change or atmospheric deposition. This can be a challenge that again requires data and professional judgement, which is best evaluated by the federal land managers and their professional staff, perhaps in cooperation with other federal and state agencies who also have expertise in the issue.

### **Affected parties**

Parties that these rules may affect include the lake and watershed managers, the National Park Service and U.S. Forest Service, recreation users and tourists, environmental Non-Governmental Organizations interested in maintaining the lakes' pristine character lakes, researchers, businesses that provide concession services in the national park, and businesses that provide recreation and tourism services to people visiting the lakes.

# Outreach efforts and public and stakeholder involvement

DEQ formed a stakeholder advisory committee to review the fiscal impact statement and provide early input on the rule language options. The committee provided information before the meetings that DEQ used to draft the fiscal impact statement. Then DEQ met with the committee twice for discussion and input on draft materials. More information on the stakeholder advisory committee may be found under the sections on the advisory committee and the fiscal impact statement below.

DEQ offered to share information with Oregon tribes and discuss their support or concerns.

# **Brief summary of fiscal impact**

DEQ concludes that the proposed rules will not cause any negative fiscal or economic impact to businesses. Because the rules will help to protect the lake qualities that attract recreation users and tourists, they support businesses that provide recreation and tourism services. The tourism industry is a significant contributor to the local economies near the lakes.

The rules are consistent with the management goals of the National Park Service and the U.S. Forest Service. However, to the extent the agencies decide additional management planning,

facility improvements or water quality monitoring are necessary to meet the ORW policy, there may be additional costs associated with those actions.

# **Procedural Summary**

# **More information**

Information about this rulemaking is on this rulemaking's web page: Waldo and Crater Lakes ORW

# **Public Hearings**

DEQ plans to hold one public hearing.

The hearing is by webinar and teleconference only.

Anyone can attend the hearing.

Date: August 18, 2020 Start time: 3:00 pm

Click on this link to join online: **Zoom Meeting** 

Meeting ID: 962 5269 9042 Meeting Password: 975644

Teleconference number: 888 475 4499

Meeting ID: 962 5269 9042

Instructions on how to join webinar: Webinar instructions

# How to comment on this rulemaking proposal

DEQ is asking for public comment on the proposed rules. Anyone can submit comments and questions about this rulemaking. A person can submit comments through an online web page, by regular mail or at the public hearing.

#### Comment deadline

DEQ will only consider comments on the proposed rules that DEQ receives by 4 p.m., on August 28, 2020.

#### Submit comment online

Any person can submit comments by going to this rulemaking's web page: Waldo and Crater Lakes ORW

### Note for public university students:

ORS 192.345(29) allows Oregon public university and OHSU students to protect their university email addresses from disclosure under Oregon's public records law. If you are an Oregon public university or OHSU student you may omit your email address when you submit a comment.

### By mail

Oregon DEQ Attn: Debra Sturdevant 700 NE Multnomah St., Room 600 Portland, OR 97232-4100

### At hearing

Aug. 18, 2020

# Sign up for rulemaking notices

Get email or text updates about this rulemaking by either:

- Signing up through this link: Water Quality Standards Mailing List
- Signing up on the rulemaking web site: Waldo and Crater Lakes ORW

Get email or text updates about other, future DEQ rulemaking by signing up through this link: DEQ Email Notice List.

# What will happen next?

DEQ will include a written response to comments in a staff report DEQ will submit to the Environmental Quality Commission. DEQ may modify the rule proposal based on the comments.

Proposed rules only become effective if the commission adopts them. DEQ's intended action is to present the proposed rule changes to the EQC as soon as possible after the earliest date on which the rule changes could take effect. DEQ intends to submit the proposed rule changes to the commission on or after Nov. 19, 2020.

# Statement of need

# What need would the proposed rule address?

The proposed rule amendments respond to a rulemaking petition to designate Waldo Lake an Outstanding Resource Water. The rules also implement the state's outstanding resource water policy and address the need to protect the exceptional water quality of Crater and Waldo lakes.

# How would the proposed rule address the need?

The rules address the need by designating Crater and Waldo lakes as Outstanding Resource Waters and adopting policies to protect the existing water quality of these lakes in Oregon's water quality standards rules. The policy will be implemented by the federal agencies that manage the lakes and their watersheds, the National Park Service and the U.S. Forest Service, respectively.

### How will DEQ know the rule addressed the need?

DEQ will know the rule addressed the need if the National Park Service and U.S. Forest Service continue to manage these lakes to protect their high water quality, and if water quality data shows the lakes are maintaining their current quality and not degrading over time.

# Rules affected, authorities, supporting documents

### Lead division

Water Quality

# Program or activity

Water Quality Standards

# **Chapter 340 action**

Amend					
	340-041-0004	340-041-0185	340-041-0345		

Statutory Authority - ORS				
468.020	468B.030	468B.035	468B.048	

Statutes Implemented - ORS				
468B.030	468B.035	468B.048		

# Documents relied on for rulemaking

Document title	Document location
	https://www.oregon.gov/deq/FilterDocs/orwo WaldoPet.pdf
	https://www.oregon.gov/deq/Regulations/rule making/Pages/rwaldoorw2020.aspx
	https://www.oregon.gov/deq/Regulations/rule making/Pages/rwaldoorw2020.aspx

# Fee Analysis

This rulemaking does not involve fees.

# Statement of fiscal and economic impact

#### Fiscal and Economic Impact

#### Waldo Lake

DEQ expects that the proposed rules, by protecting the current water quality in Waldo Lake, are likely to have no negative fiscal impact to agencies, businesses, or the public. While adopting the proposed rules is unlikely to significantly change the number of visitors to the lake, it may support already existing revenue associated with recreation and tourism.

The Willamette National Forest Land and Resource Management Plan has defined recreation objectives for Waldo Lake. Waldo Lake is an extremely popular destination for recreation in the region. There are an estimated 44,725 visitors to the Waldo Lake area per year. Most of Waldo Lake's shoreline has dispersed recreation that is semi-primitive and non-motorized. Waldo Lake's three developed campgrounds (North Waldo, Islet, and Shadow Bay) which have over 200 developed sites, are usually open starting in June or July. Typically the campgrounds are full in August and September. There are approximately 29,725 overnight campers estimated to use these three campgrounds per year.

Waldo Lake is partially surrounded by forest designated as Wilderness Area, which means no logging, development, agricultural activity, or grazing is allowed in this part of the watershed. Wilderness Area designation prohibits commercial enterprises, road development, and use of motorized vehicles or motorboats. Boats with internal combustion engines are currently prohibited on the lake.

Management goals under the USDA Forest Service's management plan for the lake include conserving the lake's unique geographical, topographical, biological, and ecological processes. The U.S. Forest Service goals for Waldo Lake management are consistent with the proposed outstanding resource water designation.

The proposed rules are not expected to change regional revenue, and may positively affect revenue if the number of people recreating in the area increases after rulemaking.

#### **Crater Lake**

DEQ expects that the proposed rules would have no negative fiscal impact on the economy of the region surrounding Crater Lake National Park. Given the lake is in a national park, the outstanding resource water designation is not expected to increase the number of visitors to the park. But neither would it be expected to have a negative impact on tourism revenue in the region. Rather, the status would support income from recreational users and visitors by helping to protect the primary feature of the park.

One of the major goals of the National Park is to provide and encourage visitor access. In 2019, there were 704,512 recreation visitors to the park and the park is considered a leading attraction in Southern Oregon which contributes a significant amount of revenue to the regional economy.

Overall, tourism contributes \$200 million annually to Klamath County, which is 1.8% of Oregon's tourism economy. This value has increased by more than 100% compared to ten years ago. According to the NPS, Crater Lake National Park contributes \$81 million annually to surrounding communities in Klamath County, Central Oregon, the Upper Rogue Valley, the Lower Rogue Valley, and the Willamette Valley. With Crater Lake National Park generating about \$32 million of Klamath Counties' total \$200 million in overall inbound tourism, the National Park accounts for about 16% of tourism in Klamath County.

There are three commercial services within and around Crater Lake National Park, known as concessions. These include Crater Lake Hospitality LLC (providing lodging, scenic tours, retail operations, food service), Crater Lake Trolley (a shuttle company providing scenic and sightseeing tours), and Xanterra Parks and Resorts Inc. (providing retail, lodging, auto, gas and service stations). In the 2016 fiscal year, revenues for concessions were \$13,413,607. In addition, there were 54,223 overnight stays within or around the park in 2019.

The National Park Service management plan and monitoring program goals are consistent with the proposed outstanding resource water rules. The monitoring program investigates potential short- and long-term changes to lake water quality. If any changes are found, staff recommend mitigation. Crater Lake has been the object of scientific studies since the 1800s and it is the most studied caldera lake in the world. This research has contributed to an internationally recognized long-term body of scientific knowledge. Crater Lake National Park has had an environmental monitoring program continuously running since 1983.

Research has been conducted by biologists at Crater Lake and by university and government scientists. The proposed rules would likely help to continue research opportunities as well as provide economic benefit associated with this activity. DEQ is unable to quantify these benefits with available information.

### **Statement of Cost of Compliance**

There is no expected cost of compliance with the rules because there are no current activities around Waldo Lake or in Crater Lake National Park that do not currently comply with the rules. The U.S. Forest Service and National Park Service already manage the lakes in a manner that is consistent with the proposed protection policies.

## State and Federal agencies

#### DEQ

There are no expected direct impacts to DEQ. The rules prevent new or increased wastewater discharges or regulated activities that would degrade the water quality of Waldo Lake and Crater Lake and their associated wetlands from its current condition. Therefore, there should be no need to develop permits, 401 certifications, or Total Daily Maximum Loads for these waterbodies.

#### U.S. Forest Service and National Park Service

DEQ does not expect any direct fiscal impacts to the Willamette National Forest or to Crater Lake National Park as a result of the proposed rules. The current management goals for Waldo Lake and Crater Lake are consistent with the proposed designation. However, if additional lake management plans or additional monitoring are needed to implement the goals, these actions may have associated costs. The possible costs are unknown with available information.

# Local governments

#### **Direct Impacts**

DEQ does not expect a direct fiscal impact to local governments as a result of this rule.

#### **Indirect Impacts**

DEQ does not expect an indirect fiscal impact to local governments as a result of this rule. Rather, the rules are expected to support revenue related to recreation and tourism.

#### **Public**

#### **Direct Impacts**

DEQ does not expect a direct fiscal impact to the public as a result of this rule.

Indirect Impacts

DEQ does not expect indirect fiscal impacts to the public as a result of this rule.

### Large businesses - businesses with more than 50 employees

**Direct Impacts** 

DEQ does not anticipate fiscal impacts to any large businesses as a result of the rule.

Indirect Impacts

DEQ does not anticipate indirect impacts to any large businesses as a result of the rule.

# Small businesses - businesses with 50 or fewer employees

**Direct Impacts** 

DEQ does not expect that the proposed rule would directly impact small businesses.

#### Indirect Impacts

The proposed rules may provide indirect benefits to businesses relying on revenue from recreational users and tourists in the area. Businesses may include: local hotels, gas stations, restaurants, campgrounds, grocery stores, camping supply stores, recreation related stores, and others that benefit from tourism and recreation. DEQ is unable to quantify such impacts with available information. But personal communication with the rulemaking advisory committee does indicate that the rules may support benefits associated with recreation, including at least six small businesses located near Waldo Lake, specifically in the Crescent Lake area, Gilchrist, and Crescent. The businesses include a sporting goods center, a tavern, two restaurants, a grocery store, and a gas station. Local businesses involving lodging and overnight accommodations are also expected to benefit.

No small businesses are located within Crater Lake National Park. Therefore, there are no impacts expected to small businesses within Crater Lake National Park. However, there are a number of small businesses in the region supported by visitors to the park. In addition, DEQ expects that the proposed rules will indirectly benefit groups that research the cultural and natural resources of Waldo and Crater lakes.

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

The proposed rules would not subject any small businesses operating in either area to meet new requirements.

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

No additional activities are required to comply with the proposed rules.

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

No additional resources are required for compliance with the proposed rules.

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

DEQ expects that the proposed rules will not negatively affect small businesses. Lynda Kamerrer, President of the Oakridge and Westfir Chamber of Commerce, provided information on small businesses in the Waldo Lake area. Jim Chadderdon, the Executive Director of Discover Klamath, provided names of small businesses that may benefit from sustained or increased tourism in the area of Waldo Lake as a result of the proposed rule. These small businesses include: Odell Sportsman Center, Manley's, The Café, Gilchrist Grocer and Deli, Mohawk Restaurant, and Crescent Shell. In addition, DEQ believes that businesses associated with lodging and accommodation may also benefit from increased tourism.

No small businesses were identified within Crater Lake National Park because there are none. However, there are a number of small businesses in the region supported by visitors to the park.

# Documents relied on for fiscal and economic impact

Document title	Document location
U.S. Forest Service, Willamette National Forest. 2007. Decision notice and finding of no significant impact managing recreation use on Waldo Lake environmental assessment. Forest Plan Amendment No. 47.	Waldo Lake Environmental Assessment
U.S. Forest Service, Pacific Northwest Region. 1990. Land and resource management plan: Willamette National Forest.	Land and Resource Management Plan: Willamette National Forest
National Park Service, U.S. Department of the Interior. 2015.	Crater Lake National Park Foundation Document

Foundation Document Crater Lake	
National Park Oregon	
National Park Service. 2017.	
Commercial Services Program 2016	Crater Lake Concession Revenue
AFR Revenues.	
National Park Service. 2020. NPS	Crater Lake Visitor Use Statistics
Visitor use statistics.	Crater Lake visitor Use Statistics

# Advisory committee fiscal review

DEQ appointed an advisory committee.

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

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

The committee reviewed the draft fiscal and economic impact statement. Its findings are available in the committee minutes on this rulemaking's web page: Waldo and Crater Lakes ORW. Committee members provided DEQ with information about visitation and the contribution of recreation and tourism to local economies in the area of the lakes. They also identified the types of small businesses, with specific examples, that serve recreation users and tourists and that will benefit from the protection of the exceptional qualities of these lakes, which attract tourists.

The committee determined the proposed rules would not have a significant adverse impact on small businesses around either Crater or Waldo lakes. Furthermore, the committee suggested there could be a positive impact on recreational and tourism businesses serving users of Waldo Lake. The committee also agreed that the outstanding resource water status will not likely have an impact on visits to Crater Lake since it is in a national park and attracts visitors from around the nation and the world.

# **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 development costs. Waldo and Crater lakes are currently on federal lands managed by the U.S. Forest Service and the National Park Service, respectively. Residential and business development is not underway and is not a goal of the management plans for either lake. In addition, the proposed rules are not expected to significantly impact development in the surrounding areas. Visitation to the

lakes is primarily driven by the recreation, natural beauty and research opportunities that currently exist.

# **Federal Relationship**

Relationship to federal requirements

ORS 183.332, 468A.327 and OAR 340-011-0029 require DEQ to attempt to adopt rules that correspond with existing equivalent federal laws and rules unless there are reasons not to do so.

Federal regulations under the Clean Water Act require that waters constituting outstanding National resources, should be designated as Outstanding Resource Waters. The federal regulations suggest states should prioritize waters of national and state parks and wildlife refuges and waters of exceptional recreational or ecological significance for consideration. Oregon has corresponding state regulations at OAR 340-041-0004 (8) regarding designation of state waters as Outstanding Resource Waters. DEQ has concluded that Waldo and Crater lakes are outstanding national resources due to their unique water quality, extreme clarity, and exceptional recreational and ecological significance. This proposal is consistent with federal requirements under the Clean Water Act.

# Land use

### Land-use considerations

In adopting new or amended rules, ORS 197.180 and OAR 340-018-0070 require DEQ to determine whether the proposed rules significantly affect land use. If so, DEQ must explain how the proposed rules comply with state wide land-use planning goals and local acknowledged comprehensive plans.

Under OAR 660-030-0005 and OAR 340 Division 18, DEQ considers that rules affect land use if:

- The statewide land use planning goals specifically refer to the rule or program, or
- The rule or program is reasonably expected to have significant effects on:
  - o Resources, objects, or areas identified in the statewide planning goals, or
  - o Present or future land uses identified in acknowledge comprehensive plans

DEQ determined whether the proposed rules involve programs or actions that affect land use by reviewing its Statewide Agency Coordination plan. The plan describes the programs that DEQ determined significantly affect land use. DEQ considers that its programs specifically relate to the following statewide goals:

#### Goal Title

5 Natural Resources, Scenic and Historic Areas, and Open Spaces

- 6 Air, Water and Land Resources Quality
- 11 Public Facilities and Services
- 16 Estuarine Resources
- 19 Ocean Resources

Statewide goals also specifically reference the following DEQ programs:

- Nonpoint source discharge water quality program Goal 16
- Water quality and sewage disposal systems Goal 16
- Water quality permits and oil spill regulations Goal 19

DEQ determined that these proposed rules do not affect land use under OAR 340-018-0030 or DEQ's State Agency Coordination Program.

# **EQC Prior Involvement**

The EQC was first involved in this issue in April 2019 when they received a rulemaking petition from National Environmental Defense Council requesting that they designate Waldo Lake an Outstanding Resource Water. In July 2019, the EQC directed DEQ to conduct rulemaking in response the petition and a staff recommendation to include Crater Lake in the rulemaking.

DEQ provided a status update to the EQC through a director's report at their meeting in July 2020.

# **Advisory Committee**

# **Background**

DEQ convened the Waldo and Crater Lake Outstanding Resource Waters Advisory Committee. The committee's purpose was to provide information for and review of the fiscal impact statement, and to provide early input on rule language options and the Waldo and Crater lakes support documents.

The committee membership, shown in the table below, included representatives from the Forest Service, National Park Service, DEQ, environmental and recreational organizations, local government and the public, and the committee met two times. The committee's web page is located at: Waldo and Crater Lakes ORW.

Waldo and Crater Lakes ORW Advisory Committee			
Name	Representing		
Rich Miller	PSU Center for Lakes and Reservoirs		
Andy Schaedel	Oregon Lakes Assn.		
Mark Riskedahl	Northwest Environmental Defense Center		
Lynda Kamerrer, President	Oakridge / Westfir Area Chamber of Commerce		
Kelly Minty Morris, Commissioner	Klamath County Commission		
Agency Advisors			
Al Johnson	Willamette National Forest		
Jennifer Gibson	Crater Lake National Park		
Scott Girdner	Crater Lake National Park		
Randy Jones	s DEQ		

# **Meeting notifications**

To notify people about the advisory committee's activities, DEQ:

- Sent GovDelivery bulletins, to the following lists:
  - Water Quality Standards
  - o Rulemaking
- Posted meeting information and materials on the web page for this rulemaking
- Added advisory committee announcements to DEQ's calendar of public meetings at DEQ Calendar.

# Committee discussions

In addition to the information included and conclusions described in the Statement of Fiscal and Economic Impact section above, the committee discussed the qualifications of the lakes for outstanding resource water designation and rule language options. Presentations were given on the unique water quality characteristics of both lakes to explain the justification and rationale for considering the designation. Committee members agreed that the lakes are unique ecologically and provide excellent recreational opportunities for visitors and should be granted the designation. The committee discussed three rulemaking language options. DEQ explained the rulemaking language and committee members shared their questions, perspectives and preferences. For additional information on advisory committee presentations and meeting minutes, see the advisory committee section of the rulemaking page: Waldo and Crater Lakes ORW.

# **Public Engagement**

### **Public notice**

DEQ provided notice of the proposed rulemaking and rulemaking hearing by:

- On July 15, 2020, filing notice with the Oregon Secretary of State for publication in the Aug. 1, 2020 Oregon Bulletin
- Posting the Notice, Invitation to Comment and Draft Rules on the web page for this rulemaking, located at: <u>Waldo and Crater Lakes ORW</u>
- Emailing interested parties on the following DEQ lists through GovDelivery
  - Rulemaking
  - Water quality standards
- Emailing the following key legislators required under ORS 183.335
  - Senator Jeff Golden, Chair, Senate Environment and Natural Resources Committee
  - Senator Alan Olsen, Vice-Chair, Senate Environment and Natural Resources Committee
  - o Representative Ken Helm, Chair, House Water Committee
  - o Representative Gary Leif, Vice-Chari, House Water Committee
  - o Representative Jeff Reardon, Vice-Chair, House Water Committee
- Emailing advisory committee members,
- Posting on the DEQ event calendar: DEQ Calendar
- Publishing notice in the following newspaper:
  - o Klamath Herald & News (Klamath Falls)

# How to comment on this rulemaking proposal

DEQ is asking for public comment on the proposed rules. Anyone can submit comments and questions about this rulemaking. A person can submit comments through an online web page, by US mail or at the public hearing.

#### Comment deadline

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Waldo and Crater Lakes ORW

# Note for public university students:

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Oregon public university or OHSU student you may omit your email address when you submit a comment.

### By mail

Oregon DEQ Attn: Debra Sturdevant 700 NE Multnomah St., Room 600 Portland, OR 97232-4100

### At hearing

Aug. 18, 2020

# **Public Hearing**

DEQ plans to hold one public hearing.

The hearing is online and by teleconference only.

Date: August 18, 2020 Start time: 3:00 pm

Instructions on how to join the webinar or teleconference: Webinar instructions

Click on this link to join online: **Zoom Meeting** 

Meeting ID: 962 5269 9042 Meeting Password: 975644

Teleconference number: 888 475 4499

Meeting ID: 962 5269 9042

DEQ will consider all comments and testimony received before the comment deadline. DEQ will summarize all comments and respond to comments in the Environmental Quality Commission staff report.

# **Accessibility Information**

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 deginfo@deq.state.or.us.

# Supporting documents

This LINK provides access to these documents:
Waldo Lake ORW Support Document
Crater Lake Support Document
Petition to the Environmental Quality Commission to Designate Waldo Lake and
Outstanding Resource Water

# **Draft Rules – Edits Highlighted**

### Key to Identifying Changed Text:

Deleted Text

New/inserted text

Text deleted from one location - and moved to another location

#### 340-041-0004

#### Antidegradation

# [NOTE: The rule amendment designates Waldo and Crater Lakes as Outstanding Resource Waters of Oregon.]

- (1) Purpose. The purpose of the Antidegradation Policy is to guide decisions that affect water quality to prevent unnecessary further degradation from new or increased point and nonpoint sources of pollution, and to protect, maintain, and enhance existing surface water quality to ensure the full protection of all existing beneficial uses. The standards and policies set forth in OAR 340-041-0007 through 340-041-0350 supplement the Antidegradation Policy.
- (2) Growth Policy. In order to maintain the quality of waters in the State of Oregon, it is the commission's general policy to require that more efficient and effective waste treatment and control accommodate growth and development such that measurable future discharged waste loads from existing sources do not exceed presently allowed discharged loads except as provided in section (3) through (9) of this rule.
- (3) Nondegradation Discharges. The following new or increased discharges are subject to this division. However, because they are not considered degradation of water quality, they are not required to undergo an antidegradation review under this rule:
- (a) Discharges Into Existing Mixing Zones. Pollutants discharged into the portion of a water body that has been included in a previous mixing zone for a permitted source, including the zones of initial dilution, are not considered a reduction in water quality, so long as the mixing zone is established in accordance with OAR 340-041-0053, there are no other overlapping mixing zones from other point sources, and the discharger complies with all effluent limits set out in its NPDES permit.
- (b) Water Conservation Activities. An increase in a pollutant concentration is not considered a reduction in water quality so long as the increase occurs as the result of a water conservation activity, the total mass load of the pollutant is not increased, and the concentration increase has no adverse effect on either beneficial uses or threatened or endangered species in the water body.

- (c) Temperature. Insignificant temperature increases authorized under OAR 340-041-0028(11) and (12) are not considered a reduction in water quality.
- (d) Dissolved Oxygen. Up to a 0.1 mg/l decrease in dissolved oxygen from the upstream end of a stream reach to the downstream end of the reach is not considered a reduction in water quality so long as it has no adverse effects on threatened and endangered species.
- (4) Recurring Activities. Since the baseline for applying the antidegradation policy to an individual source is the water quality resulting from the source's currently authorized discharge, and since regularly-scheduled, recurring activities remain subject to water quality standards and the terms and conditions in any applicable federal and state permits, certifications and licenses, the following activities will not be considered new or increasing discharges and will therefore not trigger an antidegradation review under this rule, so long as they do not increase in frequency, intensity, duration or geographical extent:
- (a) Rotating grazing pastures,
- (b) Agricultural crop rotations, and
- (c) Maintenance dredging.
- (5) Exemptions to the Antidegradation Requirement. Some activities may, on a short term basis, cause temporary water quality degradation. However, these same activities may also have substantial and desirable environmental benefits. The following activities and situations fall into this category. Such activities and situations remain subject to water quality standards and must demonstrate that they have minimized adverse effects to threatened and endangered species in order to be exempt from the antidegradation review under this rule:
- (a) Riparian Restoration Activities. Activities that are intended to restore the geomorphology or riparian vegetation of a water body, or control invasive species need not undergo an antidegradation review so long as the department determines that there is a net ecological benefit to the restoration activity. Reasonable measures that are consistent with the restoration objectives for the water body must be used to minimize the degradation;
- (b) Emergency Situations. The director or a designee may, for a period of time no greater than 6 months, allow lower water quality without an antidegradation review under this rule in order to respond to public health and welfare emergencies (for example, a significant threat of loss of life, personal injury or severe property damage); and
- (c) Exceptions. Exceptions authorized by the commission or department under (9) of this rule.
- (6) High Quality Waters Policy: Where the existing water quality meets or exceeds those levels necessary to support fish, shellfish, and wildlife propagation, recreation in and on the water, and other designated beneficial uses, that level of water quality must be maintained and protected. However, the commission, after full satisfaction of the intergovernmental

coordination and public participation provisions of the continuing planning process, and with full consideration of sections (2) and (9) of this rule, and 340-041-0007(4), may allow a lowering of water quality in these high quality waters if it finds:

- (a) No other reasonable alternatives exist except to lower water quality; and
- (b) The action is necessary and benefits of the lowered water quality outweigh the environmental costs of the reduced water quality. This evaluation will be conducted in accordance with DEQ's "Antidegradation Policy Implementation Internal Management Directive for NPDES Permits and section 401 water quality certifications," pages 27, and 33-39 (March 2001) incorporated herein by reference;
- (c) All water quality standards will be met and beneficial uses protected; and
- (d) Federal threatened and endangered aquatic species will not be adversely affected.
- (7) Water Quality Limited Waters Policy: Water quality limited waters may not be further degraded except in accordance with paragraphs (9)(a)(B), (C) and (D) of this rule.
- (8) Outstanding Resource Waters Policy. Where existing high quality waters constitute an outstanding State or national resource such as those waters designated as extraordinary resource waters, or as critical habitat areas, the existing water quality and water quality values must be maintained and protected, and classified as "Outstanding Resource Waters of Oregon."
- (a) The commission may specially designate high quality water bodies to be classified as Outstanding Resource Waters in order to protect the water quality parameters that affect ecological integrity of critical habitat or special water quality values that are vital to the unique character of those water bodies. The department will develop a screening process and establish a list of nominated water bodies for Outstanding Resource Waters designation in the Biennial Water Quality Status Assessment Report (305(b) Report). The priority water bodies for nomination include:
- (A) Those in State and National Parks;
- (B) National Wild and Scenic Rivers;
- (C) State Scenic Waterways;
- (D) Those in State and National Wildlife Refuges; and
- (E) Those in federally designated wilderness areas.
- (b) The department will bring to the commission a list of water bodies that are proposed for designation as Outstanding Resource Waters at the time of each triennial Water Quality Standards Review; and

- (c) When designating Outstanding Resource Waters, the commission may establish the water quality values to be protected and provide a process for determining what activities are allowed that would not affect the outstanding resource values. After the designation, the commission may not allow activities that may lower water quality below the level established except on a short term basis to respond to public health and welfare emergencies, or to obtain long-term water quality improvements.
- (d) The following are Outstanding Resource Waters of Oregon: The North Fork Smith River and its tributaries and associated wetlands, South Coast Basin. See OAR 340-041-0305(4).
- (A) The North Fork Smith River and its tributaries and associated wetlands, South Coast Basin. See OAR 340-041-0305(4).
- (B) Waldo Lake and its associated wetlands, Willamette Basin. See OAR 340-041-0345(7)
- (C) Crater Lake, Klamath Basin. See OAR 340-041-0185(6)
- (9) Exceptions. The commission or department may grant exceptions to this rule so long as the following procedures are met:
- (a) In allowing new or increased discharged loads, the commission or department must make the following findings:
- (A) The new or increased discharged load will not cause water quality standards to be violated;
- (B) The action is necessary and benefits of the lowered water quality outweigh the environmental costs of the reduced water quality. This evaluation will be conducted in accordance with DEQ's "Antidegradation Policy Implementation Internal Management Directive for NPDES Permits and section 401 water quality certifications," pages 27, and 33-39 (March 2001) incorporated herein by reference; and
- (C) The new or increased discharged load will not unacceptably threaten or impair any recognized beneficial uses or adversely affect threatened or endangered species. In making this determination, the commission or department may rely on the presumption that, if the numeric criteria established to protect specific uses are met, the beneficial uses they were designed to protect are protected. In making this determination the commission or department may also evaluate other state and federal agency data that would provide information on potential impacts to beneficial uses for which the numeric criteria have not been set;
- (D) The new or increased discharged load may not be granted if the receiving stream is classified as being water quality limited under sub-section (a) of the definition of "Water Quality Limited" in OAR 340-041-0002, unless:

- (i) The pollutant parameters associated with the proposed discharge are unrelated either directly or indirectly to the parameter(s) causing the receiving stream to violate water quality standards and being designated water quality limited; or
- (ii) Total maximum daily loads (TMDLs), waste load allocations (WLAs) load allocations (LAs), and the reserve capacity have been established for the water quality limited receiving stream, compliance plans under which enforcement action can be taken have been established, and there will be sufficient reserve capacity to assimilate the increased load under the established TMDL at the time of discharge; or
- (iii) Effective July 1, 1996, in water bodies designated water-quality limited for dissolved oxygen, when establishing WLAs under a TMDL for water bodies meeting the conditions defined in this rule, the department may at its discretion provide an allowance for WLAs calculated to result in no measurable reduction of dissolved oxygen (DO). For this purpose, "no measurable reduction" is defined as no more than 0.10 mg/L for a single source and no more than 0.20 mg/L for all anthropogenic activities that influence the water quality limited segment. The allowance applies for surface water DO criteria and for Intergravel dissolved oxygen (IGDO) if a determination is made that the conditions are natural. The allowance for WLAs applies only to surface water 30-day and seven-day means; or
- (iv) Under extraordinary circumstances to solve an existing, immediate and critical environmental problem, the commission or department may, after completing a TMDL but before the water body has achieved compliance with standards, consider a waste load increase for an existing source on a receiving stream designated water quality limited under sub-section (a) of the definition of "Water Quality Limited" in OAR 340-041-0002. This action must be based on the following conditions:
- (I) That TMDLs, WLAs and LAs have been set; and
- (II) That a compliance plan under which enforcement actions can be taken has been established and is being implemented on schedule; and
- (III) That an evaluation of the requested increased load shows that this increment of load will not have an unacceptable temporary or permanent adverse effect on beneficial uses or adversely affect threatened or endangered species; and
- (IV) That any waste load increase granted under subparagraph (iv) of this paragraph is temporary and does not extend beyond the TMDL compliance deadline established for the water body. If this action will result in a permanent load increase, the action must comply with sub-paragraphs (i) or (ii) of this paragraph.
- (b) The activity, expansion, or growth necessitating a new or increased discharge load is consistent with the acknowledged local land use plans as a statement of land use compatibility from the appropriate local planning agency establishes.

- (c) Oregon's water quality management policies and programs recognize that Oregon's water bodies have a finite capacity to assimilate waste. Unused assimilative capacity is an exceedingly valuable resource that enhances in-stream values and environmental quality in general. Allocation of any unused assimilative capacity should be based on explicit criteria. In addition to the conditions in subsection (a) of this section, the commission or department may consider the following:
- (A) Environmental Effects Criteria:
- (i) Adverse Out-of-Stream Effects. There may be instances where the non-discharge or limited discharge alternatives may cause greater adverse environmental effects than the increased discharge alternative. An example may be the potential degradation of groundwater from land application of wastes;
- (ii) Instream Effects. Total stream loading may be reduced through elimination or reduction of other source discharges or through a reduction in seasonal discharge. A source that replaces other sources, accepts additional waste from less efficient treatment units or systems, or reduces discharge loadings during periods of low stream flow may be permitted an increased discharge load year-round or during seasons of high flow, so long as the loading has no adverse effect on threatened and endangered species;
- (iii) Beneficial Effects. Land application, upland wetlands application, or other non-discharge alternatives for appropriately treated wastewater may replenish groundwater levels and increase streamflow and assimilative capacity during otherwise low streamflow periods.
- (B) Economic Effects Criteria. When assimilative capacity exists in a stream, and when it is judged that increased loadings will not have significantly greater adverse environmental effects than other alternatives to increased discharge, the economic effect of increased loading will be considered. Economic effects will be of two general types:
- (i) Value of Assimilative Capacity. The assimilative capacity of Oregon's streams is finite, but the potential uses of this capacity are virtually unlimited. Thus it is important that priority be given to those beneficial uses that promise the greatest return (beneficial use) relative to the unused assimilative capacity that might be utilized. In-stream uses that will benefit from reserve assimilative capacity, as well as potential future beneficial use, will be weighed against the economic benefit associated with increased loading;
- (ii) Cost of Treatment Technology. The cost of improved treatment technology, non-discharge and limited discharge alternatives may be evaluated.

**Statutory/Other Authority:** ORS 468.020, 468B.030, 468B.035 & 468B.048

**Statutes/Other Implemented:** ORS 468B.030, 468B.035 & 468B.048

**History:** 

DEQ 8-2017, f. & cert. ef. 7-18-17 DEQ 2-2007, f. & cert. ef. 3-15-07 DEQ 17-2003, f. & cert. ef. 12-9-03

#### 340-041-0345

Basin-Specific Criteria (Willamette): Water Quality Standards and Policies for this Basin

[Note: The rule amendment establishes a policy to protect the water quality of Waldo Lake from degradation.]

- (1) pH (hydrogen ion concentration). pH values may not fall outside the following ranges:
- (a) All basin waters, except main stem Columbia River and Cascade lakes: 6.5 to 8.5;
- (b) Cascade lakes above 3,000 feet altitude: 6.0 to 8.5.
- (2) Total Dissolved Solids. Guide concentrations listed may not be exceeded unless DEQ specifically authorizes otherwise upon such conditions as it may deem necessary to carry out the general intent of this plan and to protect the beneficial uses set forth in OAR 340-041-0340: Willamette River and Tributaries 100.0 mg/l.
- (3) Minimum Design Criteria for Treatment and Control of Sewage Wastes:
- (a) Willamette River and tributaries except Tualatin River Subbasin:
- (A) During periods of low stream flows (approximately May 1 to October 31): Treatment resulting in monthly average effluent concentrations not to exceed 10 mg/l of BOD and 10 mg/l of SS or equivalent control;
- (B) During the period of high stream flows (approximately November 1 to April 30): A minimum of secondary treatment or equivalent control and, unless DEQ otherwise specifically authorizes, operating all waste treatment and control facilities at maximum practical efficiency and effectiveness so as to minimize waste discharges to public waters.
- (b) Main stem Tualatin River from mouth to Gaston (river mile 0 to 65):
- (A) During periods of low stream flows (approximately May 1 to October 31): Treatment resulting in monthly average effluent concentrations not to exceed 10 mg/l of BOD and 10 mg/l of SS or equivalent control;
- (B) During the period of high stream flows (approximately November 1 to April 30): Treatment resulting in monthly average effluent concentrations not to exceed 20 mg/l of BOD and 20 mg/l of SS or equivalent control.

- (c) Main stem Tualatin River above Gaston (river mile 65) and all tributaries to the Tualatin River: Treatment resulting in monthly average effluent concentrations not to exceed 5 mg/l of BOD and 5 mg/l of SS or equivalent control;
- (d) Tualatin River Subbasin: The dissolved oxygen level in the discharged effluents may not be less than 6 mg/l;
- (4) Nonpoint source pollution control in the Tualatin River subbasin and lands draining to Oswego Lake:
- (a) Subsection (5)(b) of this rule applies to any new land development within the Tualatin River and Oswego Lake subbasins except those developments with application dates before January 1, 1990. The application date is the date on which the local jurisdiction receives a complete application for development approval as the local jurisdiction's regulations require;
- (b) For land development, no jurisdiction in these subbasins may approve any preliminary plat, site plan, permit, or public works project unless the conditions of the plat permit or plan approval include an erosion control plan containing methods or interim facilities, or both, to be constructed or used concurrently with land development and to be operated during construction to control the discharge of sediment in the stormwater runoff. The erosion control plan must include the following elements:
- (A) Protection techniques to control soil erosion and sediment transport to less than one ton per acre per year, as calculated using the Natural Resources Conservation Service's Universal Soil Loss Equation or other equivalent methods (see Figures 1 to 6 in Appendix 1 for examples). The erosion control plan must include temporary sedimentation basins or other sediment control devices when, because of steep slopes or other site specific considerations, other on-site sediment control methods will not likely keep the sediment transport to less than one ton per acre per year. The local jurisdictions may establish additional requirements for meeting an equivalent degree of control. Any sediment basin constructed must be sized using 1.5 feet minimum sediment storage depth plus 2.0 feet storage depth above for a settlement zone. The storage capacity of the basin must be sized to store all of the sediment that is likely to be transported and collected during construction while the erosion potential exists. When the erosion potential has been removed, the sediment basin, or other sediment control facilities, can be removed and the site restored as per the final site plan. All sediment basins must be constructed with an emergency overflow to prevent erosion or failure of the containment dike; or
- (B) A soil erosion control matrix derived from and consistent with the universal soil equation the jurisdiction or DEQ approves.
- (c) The Director may modify Appendix 1 as necessary without approval from the Environmental Quality Commission. The Director may modify Appendix 1 to simplify it and to make it easier for people to apply;

- (d) Subsection (5)(e) of this rule applies to any new land development within the Tualatin River and Oswego Lake subbasins, except:
- (A) Those developments with application dates before June 1, 1990. The application date is the date on which the local jurisdiction receives a complete application for development approval as that jurisdiction's regulations require;
- (B) One and two family dwellings on existing lots of record;
- (C) Sewer lines, water lines, utilities, or other land development that will not directly increase nonpoint source pollution once construction has been completed and the site is either restored to, or not altered from, its approximate original condition;
- (D) If the Environmental Quality Commission determines that a jurisdiction does not need to require stormwater quality control facilities for new development;
- (E) When a jurisdiction adopts ordinances that provide for a stormwater quality program equivalent to subsection (e) of this section. Ordinances adopted to implement equivalent programs must:
- (i) Encourage on-site retention of stormwater, require phosphorus removal equivalent to the removal efficiency required by subsection (e) of this section, provide for adequate operation and maintenance of stormwater quality control facilities, and require financial assurance, or equivalent security, that assures construction of the stormwater quality control facilities the ordinance requires;
- (ii) If the ordinances provide for exemptions other than those allowed for by paragraphs (B) and (C) of this subsection, the ordinances must provide for collecting in-lieu fees, or other equivalent mechanisms, that assure financing for, and construction of, associated, off-site stormwater quality control facilities. No exemption may be allowed if the jurisdiction is not meeting an approved schedule for identifying location of the off-site stormwater quality control facility to serve the development requesting an exemption.
- (e) For new development, no jurisdiction may approve any plat, site plan, building permit or public works project in these subbasins unless the conditions of the plat, permit, or plan approval require permanent stormwater quality control facilities to control phosphorus loadings associated with stormwater runoff from the development site. Jurisdictions must encourage and provide preference to techniques and methods that prevent and minimize pollutants from entering the storm and surface water systems. Permanent stormwater quality control facilities for phosphorus must meet the following requirements:
- (A) The stormwater quality control facilities must be designed to achieve a phosphorus removal efficiency as calculated from the following equation:

$$Rp = 100 - 24.5/Rv$$

Where:

Rp = Required phosphorus removal efficiency

Rv = Average site runoff coefficient

The average site runoff coefficient can be calculated from the following equation:

$$Rv = (0.7 x A1) + (0.3 x A2) + (0.7 x A3) + (0.05 x A4) + (A5 x 0.0)$$

Where:

A1 = fraction of total area that is paved streets with curbs and that drain to storm sewers or open ditches.

A2 = fraction of total area that is paved streets that drain to water quality swales located on site.

A3 = fraction of total area that is building roof and paved parking that drains to storm sewers.

A4 = fraction of total area that is grass, trees and marsh areas.

A5 = fraction of total area for which runoff will be collected and retained on site with no direct discharge to surface waters.

- (B) A jurisdiction may modify the equation for Rv to allow applying additional runoff coefficients associated with land surfaces not identified in this subsection. DEQ must be notified in writing whenever an additional runoff coefficient is used. The use of additional runoff coefficients must be based on scientific data. The jurisdiction must discontinue using an additional runoff coefficient if DEQ objects to its use in writing within ten days of receiving notification;
- (C) The stormwater quality control facilities must be designed to meet the removal efficiency specified in paragraph (A) of this subsection for a mean summertime storm event totaling 0.36 inches of precipitation with an average return period of 96 hours;
- (D) The removal efficiency specified in paragraph (A) of this subsection specify only design requirements and are not intended to be used as a basis for performance evaluation or compliance determination of the stormwater quality control facility installed or constructed pursuant to this subsection;
- (E) A jurisdiction may approve stormwater quality control facilities this subsection requires only if the following are met:

- (i) For developments larger than one acre, the plat or site plan must include plans and a certification prepared by an Oregon registered, professional engineer, that the proposed stormwater control facilities have been designed in accordance with criteria expected to achieve removal efficiencies for total phosphorus required by paragraph (A) of this subsection;
- (ii) The plat or site plan must be consistent with the area and associated runoff coefficients used to determine the removal efficiency required in paragraph (A) of this subsection;
- (iii) The developer must provide a financial assurance, or equivalent security acceptable to the jurisdiction, with the jurisdiction that assures that the stormwater control facilities are constructed according to the plans established in the plat or site plan approval. Where practicable, the jurisdiction must combine the financial assurance this rule requires with other financial assurance requirements imposed by the jurisdiction;
- (iv) Each jurisdiction that constructs or authorizes construction of permanent stormwater quality control facilities must file with DEQ an operation and maintenance plan for the stormwater quality control facilities within its jurisdiction. The operation and maintenance plan must allow for public or private ownership, operation, and maintenance of individual permanent stormwater quality control facilities. The jurisdiction or private operator must operate and maintain the permanent stormwater control facilities as the operation and maintenance plan specifies.
- (f) Except as paragraph (D) of this subsection requires, the jurisdiction may grant an exception to subsection (e) of this section if the jurisdiction chooses to adopt and, on a case-by-case basis, impose a one time in-lieu fee. The fee will be an option where, because of the size of the development, topography, or other factors, the jurisdiction determines that the construction of on-site permanent stormwater treatment systems is impracticable or undesirable:
- (A) The in-lieu fee will be based upon a reasonable estimate of the current, prorated cost for the jurisdiction to provide stormwater quality control facilities for the land development being assessed the fee. Estimated costs include costs associated with off-site land and rights-of-way acquisition, design, construction, and construction inspection;
- (B) The jurisdiction must deposit any in-lieu fees collected under this paragraph in an account dedicated only to reimbursing the jurisdiction for expenses related to off-site land and rights-of-way acquisition, design, construction, and construction inspection of stormwater quality control facilities;
- (C) The ordinance establishing the in-lieu fee must include provisions that reduce the fee in proportion to the ratio of the site's average runoff coefficient (Rv), as established according to the equation in paragraph (6)(e)(A) of this rule;

- (D) No new development may be granted an exemption if the jurisdiction is not meeting an approved time schedule for identifying the location for the off-site stormwater quality control facilities that would serve that development.
- (g) DEQ may approve other mechanisms that allow jurisdictions to grant exemptions to new development. DEQ may only approve those mechanisms that assure financing for off-site stormwater quality control facilities and that encourage or require on-site retention where feasible;
- (h) Subsection (b) of this section applies until a jurisdiction adopts ordinances that provide for a program equivalent to subsection (b) of this section, or the Environmental Quality Commission determines such a program is not necessary when it approves the jurisdiction's program plan required by OAR 340-041-0470(2)(g).
- (5) In order to improve water quality within the Yamhill River subbasin to meet the existing water quality standard for pH, the following special rules for total maximum daily loads, waste load allocations, load allocations and program plans are established:
- (a) After wastewater control facilities and program plans the EQC approved under this rule are completed, and no later than June 30, 1994, no activities may be allowed, and no wastewater may be discharged to the Yamhill River or its tributaries, without the EQC's authorization, that cause the monthly median concentration of total phosphorus to exceed 70 ug/1 as measured during the low flow period between approximately May 1 and October 31 of each year;

[NOTE: DEQ may condition precise dates for complying with this rule on the receiving water's physical conditions (i.e., flow temperature). DEQ may specify the compliance dates in individual permits or memorandums of understanding. DEQ may consider design flows, river travel times, and other relevant information, when establishing the specific conditions it inserts in the permits or memorandums of understanding.]

- (b) Within 90 days of adoption of these rules, the Cities of McMinnville and Lafayette must submit a program plan and time schedule to DEQ describing how and when they will modify their sewerage facility to comply with this rule;
- (c) The commission will review and approve final program plans. The commission may define alternative compliance dates as program plans are approved. All proposed final program plans must be subject to public hearing before the commission considers them for approval;
- (d) DEQ will, within 60 days of adoption of these rules, distribute initial waste load allocations and load allocations to the point and nonpoint sources in the basin. These allocations are considered interim and may be redistributed based upon the conclusions of the approved program plans.

(6) Multiple Discharger Variance for Mercury. The following rule is a multiple discharger variance to the fish-tissue based human health criterion for methylmercury. The variance applies to the following facilities:

Albany-Millersburg WRF (Willamette River); Canby STP (Willamette River); Cascade Pacific – Halsey Mill (Willamette River); City of Molalla (Molalla River); City of Portland Tryon Creek WWTP (Willamette River); City of Sandy (Tickle Creek); Clean Water Services Durham STP (Tualatin River); Clean Water Services Forest Grove STP (Tualatin River), Clean Water Services Hillsboro STP (Tualatin River), Clean Water Services Rock Creek STP (Tualatin River); Corvallis STP (Willamette River), Cottage Grove STP (Coast Fork Willamette River); Dallas STP (Rickreall Creek); Georgia-Pacific Halsey Mill (Willamette River); Gervais STP (Pudding River); International Paper Springfield Paper Mill (McKenzie River); Kellogg Creek WWTP (Willamette River); Lebanon WWTP (South Santiam River); McMinnville WRF (South Yamhill River); Metropolitan Wastewater Management Commission Eugene/Springfield STP (Willamette River); Newberg STP (Willamette River); Oak Lodge Services WRF (Willamette River); Saint Helens/Boise Cascade STP (Multnomah Channel); Salem Willow Lake STP (Willamette River); Siltronic Corporation (Willamette River); Silverton STP (Silver Creek); Stayton STP (North Santiam River); Sweet Home STP (South Santiam River); Teledyne Wah Chang (Willamette River); Tri-City Service District – Blue Heron (Willamette River); Tri-City Water Pollution Control Plant (Willamette River); West Linn Paper Company (Willamette River); Westrock, Newberg Mill (Willamette River); Wilsonville STP (Willamette River); Woodburn WWTP (Pudding River);

The variance will also apply to any of the following facilities for which DEQ would otherwise be required to establish mercury effluent limits during the term of the variance:

Amity STP (Salt Creek); Aumsville STP (Beaver Creek); Brooks STP (Willamette River); Brownsville STP (Calapooia River); Carlton STP (North Yamhill River); City of Estacada (Clackamas River); City of Scappoose (Multnomah Channel); Coburg WWTP (Unnamed tributary to Muddy Creek); Creswell STP (Unnamed tributary to Camas Swale Creek); Dayton STP (Yamhill River); Dundee STP (Willamette River); Halsey STP (Muddy Creek); Harrisburg Lagoon Treatment Plant (Willamette River); Hubbard STP (Mill Creek); Independence STP (Middle Willamette River); Jefferson STP (Santiam River); Junction City STP (Flat Creek); Lafayette STP (Yamhill River); Lane Community College (Russel Creek); Lowell STP (Middle Fork Willamette River); Monmouth STP (Willamette River); Mt. Angel STP (Pudding River); Oakridge STP (Middle Fork Willamette River); Philomath STP (Mary's River); Tangent STP (Calapooia River); Sheridan STP (South Yamhill River); USDA Forest Service (Clackamas River); Veneta STP (Long Tom River); Willamina STP (South Yamhill River); Yamhill STP (North Yamhill River).

- (a) Findings. The EQC finds the following:
- (A) The fishing use and fish-tissue based human health criterion for methyl-mercury cannot be attained within the next 20 years due to mercury from atmospheric deposition and naturally occurring mercury in native soils. Neither the sources of mercury nor the processes

by which the mercury is transported to waterbodies can be remedied to meet the underlying designated use and criterion within the next 20 years.

- (B) There is no currently feasible mercury treatment technology that would result in achieving water quality-based effluent limits based on the human health criterion for mercury.
- (C) The requirements of the variance will not result in degrading the currently attained ambient water quality for methyl-mercury in the Willamette Basin.
- (b) Term of the variance. The term of this variance is 20 years from the date of EPA approval.
- (c) Application requirements. To implement the variance, a facility must provide to DEQ the following information:
- (A) All mercury effluent data from the previous five years, including a minimum of two years of quarterly effluent data.
- (B) A facility-specific mercury minimization program with minimum elements described in subsection (6)(f) of this rule for municipal facilities or subsection (6)(g) of this rule for industrial facilities.
- (d) Highest attainable condition. Permit requirements will reflect the highest attainable condition specified in this variance. The highest attainable condition for this variance is the level currently achievable, as described in subsection (6)(e) below, for all dischargers, and a requirement to develop and implement a mercury minimization program with elements described in subsection (6)(f) of this rule for municipal dischargers and subsection (6)(g) of this rule for industrial dischargers.
- (e) Highest attainable condition level currently achievable (LCA). The highest attainable condition for all facilities covered under this variance will include the level currently achievable. This is a quantifiable expression of the effluent condition achievable with the pollutant control technologies in place at the time this variance is granted when those technologies are well maintained and operated. The LCA for this variance is the 95th percentile value of recent (e.g., two to five years) total mercury effluent data or a previously applicable LCA, whichever is lower.
- (f) Highest attainable condition mercury minimization program for municipal dischargers. The highest attainable condition for municipal dischargers will include implementing a mercury minimization program covering the term of the variance, which must contain the following minimum elements:
- (A) A monitoring plan to include influent, effluent and biosolids monitoring;

- (B) Regulating dental offices to ensure installation and maintenance of amalgam separators, including inspection of dental facilities for proper management and disposal of dental waste;
- (C) Identifying mercury-containing materials at facilities and offices each municipal wastewater treatment facility operates and implementing any recommendations for removing mercury-containing materials;
- (D) Identifying and inspecting commercial laboratories, schools and healthcare facilities that may have mercury and providing recommendations and outreach materials to these facilities;
- (E) Distributing outreach materials to commercial and residential sectors;
- (F) Evaluating new facilities as potential sources of mercury, regulatory oversight of such sources of mercury under the municipality's pre-treatment program where such sources are significant industrial users, and outreach to provide recommendations on activities that would reduce mercury in the facilities' discharges. Priority facilities should include those in the timber, paper, glass, clay, cement, concrete, gypsum, primary and fabricated metal, and electronic instrument sectors;
- (G) Cleanup of legacy mercury from collection systems;
- (H) Facility-specific activities to reduce mercury loading into the waterbody. These may include cost-effective and reasonable best management practices for nonpoint source controls under the control of the discharger that would make progress towards attaining the underlying designated use and criterion; and
- (I) If a facility has accomplished all activities within its control, the facility may implement or fund mercury reduction activities outside the discharger's control that will make progress toward attaining the underlying designated use and criterion.
- (g) Highest attainable condition mercury minimization program for industrial dischargers. The highest attainable condition for industrial dischargers will include implementing a mercury minimization program covering the term of the variance, with the following minimum elements:
- (A) A monitoring plan to include influent, effluent and biosolids monitoring;
- (B) Identifying mercury-containing materials used in the facility, offices and testing laboratories the discharger operates, and developing and implementing recommendations for using substitute materials with less or no mercury;
- (C) Identifying other potential sources of mercury within the facility and developing and implementing recommendations for reducing these sources;
- (D) Identifying other activities within discharger's control discharger to reduce mercury loading into the waterbody. These may include cost-effective and reasonable best

management practices for nonpoint source controls under the discharger's control that would make progress towards attaining the underlying designated use and criterion; and

- (E) If a facility has accomplished all activities within its control, the facility may implement or fund mercury reduction activities outside the discharger's control that will make progress toward attaining the underlying designated use and criterion.
- (h) State mercury reduction activities in Oregon. The state implements numerous programs that will, over time, including over the 20-year term of this variance, reduce mercury loads to Willamette Basin waterbodies, including such programs as:
- (A) Oregon's Dental Amalgam Law and associated practices as required under ORS 679.520 and ORS 679.525, and subsequent federal regulations.
- (B) Airborne toxic contaminant reduction from existing or newly permitted industrial sources through the Cleaner Air Oregon program and other DEQ Air Quality permitting requirements.
- (C) DEQ coordination with the Oregon Department of Forestry on implementing the Forest Practices Act.
- (D) DEQ coordination with the Oregon Department of Agriculture on implementing the Oregon Agriculture Water Quality Management Act.
- (E) DEQ issuing general discharge permits, such as Phase I and Phase II municipal separate storm sewer system permits, industrial stormwater permits, and suction dredge mining permits, in addition to individual wastewater discharge permits.
- (F) DEQ in-water and upland remediation under state laws and rules, and coordination with US EPA on Portland Harbor, Gould, and Black Butte Mine Superfund site cleanups.
- (G) Regulatory and voluntary programs to reduce or recycle products containing mercury, such as automotive light switches, thermostats, and LCD screens and monitors.
- (i) Re-evaluating the Highest Attainable Condition. DEQ will re-evaluate the highest attainable condition for this multiple discharger variance every five years from the date that EPA approves this variance. DEQ will provide a written summary of this re-evaluation to EPA within 30 days of completing the re-evaluation. If DEQ fails to submit the re-evaluation to EPA within the specified timeframe, the variance will no longer be the applicable water quality standard until DEQ completes the re-evaluation and submits it to EPA.
- (A) The re-evaluation will include the following elements:
- (i) A summary of the mercury reduction activities completed and an analysis of mercury reductions facilities covered under this variance achieved, using the data and information provided in their annual reports; and

- (ii) A determination of the feasibility of wastewater treatment technology to attain the water quality standard.
- (B) DEQ will provide public notice on the availability of its draft re-evaluation and provide at least 30 days opportunity for the public to comment on the draft re-evaluation.
- (C) Upon permit renewal for each facility covered under the variance, DEQ will update conditions in the permit based on the re-evaluation of the Highest Attainable Condition, as follows:
- (i) DEQ will re-calculate each facility's level currently achievable, as described in OAR 340-041-0345(6)(e), utilizing the previous five years of data provided by each facility, at the time of their permit renewal. DEQ will adjust permit limits if the data shows that the level currently achievable is lower than the LCA in the previous permit.
- (ii) DEQ will review updates to the facility's site-specific mercury minimization plan and, if necessary, request revisions to ensure that it is consistent with variance requirements.
- (7) Outstanding Resource Waters of Oregon (ORWs)
- (a) Waldo Lake and associated wetlands.
- (b) The current high water quality, exceptional ecological values, and existing and designated uses of the ORWs identified in this rule ("these waters") shall be maintained and protected except as altered by natural causes.
- (c) No new NPDES discharge or expansion of an existing discharge to these waters shall be allowed.
- (d) No new NPDES discharge or expansion of an existing discharge to waters upstream of or tributary to these waters shall be allowed if such discharge would significantly degrade the water quality within these waters.
- (e) No activities shall be allowed that would degrade the existing water quality and ecological characteristics and values of these waters.

Statutory/Other Authority: ORS 468.020, 468B.030, 468B.035 & 468B.048

**Statutes/Other Implemented:** ORS 468B.030, 468B.035 & 468B.048

**History:** 

DEQ 4-2020, minor correction filed 01/27/2020, effective 01/27/2020

DEO 3-2020, amend filed 01/24/2020, effective 01/24/2020

DEQ 13-2019, amend filed 05/16/2019, effective 05/16/2019

DEO 38-2018, minor correction filed 04/02/2018, effective 04/02/2018

DEQ 2-2007, f. & cert. ef. 3-15-07 DEO 17-2003, f. & cert. ef. 12-9-03

#### 340-041-0185

Basin-Specific Criteria (Klamath): Water Quality Standards and Policies for this Basin

[Note: The rule amendment establishes a policy to protect the water quality of Crater Lake from degradation.]

- (1) pH (hydrogen ion concentration). pH values may not fall outside the following ranges:
- (a) Fresh waters except Cascade lakes: pH values may not fall outside the range of 6.5-9.0. When greater than 25 percent of ambient measurements taken between June and September are greater than pH 8.7, and as resources are available according to priorities set by the Department, the Department will determine whether the values higher than 8.7 are anthropogenic or natural in origin;
- (b) Cascade lakes above 5,000 feet altitude: pH values may not fall outside the range of 6.0 to 8.5.
- (2) Temperature. From June 1 to September 30, no NPDES point source that discharges to the portion of the Klamath River designated for cool water species may cause the temperature of the water body to increase more than 0.3°C above the natural background after mixing with 25% of the stream flow. Natural background for the Klamath River means the temperature of the Klamath River at the outflow from Upper Klamath Lake plus any natural warming or cooling that occurs downstream. This criterion supersedes OAR 340-041-0028(9)(a) during the specified time period for NPDES permitted point sources.
- (3) Total Dissolved Solids. Guide concentrations listed below may not be exceeded unless otherwise specifically authorized by DEQ upon such conditions as it may deem necessary to carry out the general intent of this plan and to protect the beneficial uses set forth in OAR 340-041-0180: main stem Klamath River from Klamath Lake to the Oregon-California Border (river miles 255 to 208.5): The specific conductance may not exceed 400 micro-ohms at 77°F when measured at the Oregon-California Border (river mile 208.5).
- (4) Minimum Design Criteria for Treatment and Control of Sewage Wastes:
- (a) During periods of low streams flows (approximately May 1 to October 31): Treatment resulting in monthly average effluent concentrations not to exceed 20 mg/l of BOD and 20 of suspended solids or equivalent control;
- (b) During the period of high stream flows (approximately November 1 to April 30): A minimum of secondary treatment or equivalent control and unless otherwise specifically authorized by the Department, operation of all waste treatment and control facilities to maximum practicable efficient and effectiveness so as to minimize waste discharge to public waters.
- (5) Time Schedule for Dam Removal.

- (a) DEQ may issue a 401 Water Quality Certification for the federal license or permit authorizing the removal of J.C. Boyle Dam on the Klamath River that includes a time schedule for compliance with water quality standards, if DEQ makes the following findings:
- (A) The dam removal and its associated water quality impacts will be of limited duration;
- (B) The dam removal and related restoration activities will provide a net ecological benefit;
- (C) The dam removal will be performed in a manner minimizing, to the maximum extent practicable, adverse impacts to water quality, threatened and endangered species, and beneficial uses of the Klamath River; and
- (D) The dam removal, by the end of a specified time schedule, is not expected to cause an exceedance of a water quality standard set forth in this Division.
- (b) Any 401 Water Quality Certification issued by DEQ for removal of J.C. Boyle Dam must:
- (A) Be based on an application, evaluation, and public participation complying with OAR chapter 340 division 48; and
- (B) Contain conditions ensuring that the dam removal:
- (i) <u>Wwill</u> be performed in accordance with interim milestones and a time schedule specified in the certification;
- (ii) Wwill be performed in a manner that, to the maximum practicable extent, minimizes adverse impacts to water quality, threatened and endangered species, and beneficial uses of the Klamath River (including the use of best practices and interim and post-removal protection, mitigation, and monitoring measures); and
- (iii) Wwill not cause an exceedance of a water quality standard set forth in this Division by the end of the maximum period for meeting standards specified in the certification.
- (6) Outstanding Resource Waters of Oregon (ORWs)
- (a) Crater Lake
- (b) The current high water quality, exceptional ecological values, and existing and designated uses of Crater Lake shall be maintained and protected, except if altered by causes beyond the control of park management.
- (c) No new NPDES discharge or increase of an existing NPDES discharge to Crater Lake shall be allowed, except construction stormwater permits for limited duration projects.

(d) Activities in and on Crater Lake and in the watershed shall be managed to protect and maintain the existing water quality of Crater Lake, except on a short-term basis to respond to public health and welfare emergencies, or to obtain long-term restoration or water quality improvements.

(e) The Environmental Quality Commission acknowledges the mandate of Crater Lake National Park to also manage the park for the purpose of providing public access and enjoyment.

 $\textbf{Statutory/Other Authority:} \ ORS\ 468.020, 468B.030, 468B.035\ \&\ 468B.048$ 

**Statutes/Other Implemented:** ORS 468B.030, 468B.035 & 468B.048

**History:** 

DEQ 2-2012, f. & cert .ef. 5-21-12 DEQ 1-2007, f. & cert. ef. 3-14-07 DEQ 17-2003, f. & cert. ef. 12-9-03

### **Draft Rules – Edits Incorporated**

340-041-0004

### Antidegradation

# [NOTE: The rule amendment designates Waldo and Crater Lakes as Outstanding Resource Waters of Oregon.]

- (1) Purpose. The purpose of the Antidegradation Policy is to guide decisions that affect water quality to prevent unnecessary further degradation from new or increased point and nonpoint sources of pollution, and to protect, maintain, and enhance existing surface water quality to ensure the full protection of all existing beneficial uses. The standards and policies set forth in OAR 340-041-0007 through 340-041-0350 supplement the Antidegradation Policy.
- (2) Growth Policy. In order to maintain the quality of waters in the State of Oregon, it is the commission's general policy to require that more efficient and effective waste treatment and control accommodate growth and development such that measurable future discharged waste loads from existing sources do not exceed presently allowed discharged loads except as provided in section (3) through (9) of this rule.
- (3) Nondegradation Discharges. The following new or increased discharges are subject to this division. However, because they are not considered degradation of water quality, they are not required to undergo an antidegradation review under this rule:
- (a) Discharges Into Existing Mixing Zones. Pollutants discharged into the portion of a water body that has been included in a previous mixing zone for a permitted source, including the zones of initial dilution, are not considered a reduction in water quality, so long as the mixing zone is established in accordance with OAR 340-041-0053, there are no other overlapping mixing zones from other point sources, and the discharger complies with all effluent limits set out in its NPDES permit.
- (b) Water Conservation Activities. An increase in a pollutant concentration is not considered a reduction in water quality so long as the increase occurs as the result of a water conservation activity, the total mass load of the pollutant is not increased, and the concentration increase has no adverse effect on either beneficial uses or threatened or endangered species in the water body.
- (c) Temperature. Insignificant temperature increases authorized under OAR 340-041-0028(11) and (12) are not considered a reduction in water quality.
- (d) Dissolved Oxygen. Up to a 0.1 mg/l decrease in dissolved oxygen from the upstream end of a stream reach to the downstream end of the reach is not considered a reduction in water quality so long as it has no adverse effects on threatened and endangered species.

- (4) Recurring Activities. Since the baseline for applying the antidegradation policy to an individual source is the water quality resulting from the source's currently authorized discharge, and since regularly-scheduled, recurring activities remain subject to water quality standards and the terms and conditions in any applicable federal and state permits, certifications and licenses, the following activities will not be considered new or increasing discharges and will therefore not trigger an antidegradation review under this rule, so long as they do not increase in frequency, intensity, duration or geographical extent:
- (a) Rotating grazing pastures,
- (b) Agricultural crop rotations, and
- (c) Maintenance dredging.
- (5) Exemptions to the Antidegradation Requirement. Some activities may, on a short term basis, cause temporary water quality degradation. However, these same activities may also have substantial and desirable environmental benefits. The following activities and situations fall into this category. Such activities and situations remain subject to water quality standards and must demonstrate that they have minimized adverse effects to threatened and endangered species in order to be exempt from the antidegradation review under this rule:
- (a) Riparian Restoration Activities. Activities that are intended to restore the geomorphology or riparian vegetation of a water body, or control invasive species need not undergo an antidegradation review so long as the department determines that there is a net ecological benefit to the restoration activity. Reasonable measures that are consistent with the restoration objectives for the water body must be used to minimize the degradation;
- (b) Emergency Situations. The director or a designee may, for a period of time no greater than 6 months, allow lower water quality without an antidegradation review under this rule in order to respond to public health and welfare emergencies (for example, a significant threat of loss of life, personal injury or severe property damage); and
- (c) Exceptions. Exceptions authorized by the commission or department under (9) of this rule.
- (6) High Quality Waters Policy: Where the existing water quality meets or exceeds those levels necessary to support fish, shellfish, and wildlife propagation, recreation in and on the water, and other designated beneficial uses, that level of water quality must be maintained and protected. However, the commission, after full satisfaction of the intergovernmental coordination and public participation provisions of the continuing planning process, and with full consideration of sections (2) and (9) of this rule, and 340-041-0007(4), may allow a lowering of water quality in these high quality waters if it finds:
- (a) No other reasonable alternatives exist except to lower water quality; and

- (b) The action is necessary and benefits of the lowered water quality outweigh the environmental costs of the reduced water quality. This evaluation will be conducted in accordance with DEQ's "Antidegradation Policy Implementation Internal Management Directive for NPDES Permits and section 401 water quality certifications," pages 27, and 33-39 (March 2001) incorporated herein by reference;
- (c) All water quality standards will be met and beneficial uses protected; and
- (d) Federal threatened and endangered aquatic species will not be adversely affected.
- (7) Water Quality Limited Waters Policy: Water quality limited waters may not be further degraded except in accordance with paragraphs (9)(a)(B), (C) and (D) of this rule.
- (8) Outstanding Resource Waters Policy. Where existing high quality waters constitute an outstanding State or national resource such as those waters designated as extraordinary resource waters, or as critical habitat areas, the existing water quality and water quality values must be maintained and protected, and classified as "Outstanding Resource Waters of Oregon."
- (a) The commission may specially designate high quality water bodies to be classified as Outstanding Resource Waters in order to protect the water quality parameters that affect ecological integrity of critical habitat or special water quality values that are vital to the unique character of those water bodies. The department will develop a screening process and establish a list of nominated water bodies for Outstanding Resource Waters designation in the Biennial Water Quality Status Assessment Report (305(b) Report). The priority water bodies for nomination include:
- (A) Those in State and National Parks;
- (B) National Wild and Scenic Rivers;
- (C) State Scenic Waterways;
- (D) Those in State and National Wildlife Refuges; and
- (E) Those in federally designated wilderness areas.
- (b) The department will bring to the commission a list of water bodies that are proposed for designation as Outstanding Resource Waters at the time of each triennial Water Quality Standards Review; and
- (c) When designating Outstanding Resource Waters, the commission may establish the water quality values to be protected and provide a process for determining what activities are allowed that would not affect the outstanding resource values. After the designation, the commission may not allow activities that may lower water quality below the level established

except on a short term basis to respond to public health and welfare emergencies, or to obtain long-term water quality improvements.

- (d) The following are Outstanding Resource Waters of Oregon:
- (A) The North Fork Smith River and its tributaries and associated wetlands, South Coast Basin. See OAR 340-041-0305(4).
- (B) Waldo Lake and its associated wetlands, Willamette Basin. See OAR 340-041-0345(7)
- (C) Crater Lake, Klamath Basin. See OAR 340-041-0185(6)
- (9) Exceptions. The commission or department may grant exceptions to this rule so long as the following procedures are met:
- (a) In allowing new or increased discharged loads, the commission or department must make the following findings:
- (A) The new or increased discharged load will not cause water quality standards to be violated;
- (B) The action is necessary and benefits of the lowered water quality outweigh the environmental costs of the reduced water quality. This evaluation will be conducted in accordance with DEQ's "Antidegradation Policy Implementation Internal Management Directive for NPDES Permits and section 401 water quality certifications," pages 27, and 33-39 (March 2001) incorporated herein by reference; and
- (C) The new or increased discharged load will not unacceptably threaten or impair any recognized beneficial uses or adversely affect threatened or endangered species. In making this determination, the commission or department may rely on the presumption that, if the numeric criteria established to protect specific uses are met, the beneficial uses they were designed to protect are protected. In making this determination the commission or department may also evaluate other state and federal agency data that would provide information on potential impacts to beneficial uses for which the numeric criteria have not been set;
- (D) The new or increased discharged load may not be granted if the receiving stream is classified as being water quality limited under sub-section (a) of the definition of "Water Quality Limited" in OAR 340-041-0002, unless:
- (i) The pollutant parameters associated with the proposed discharge are unrelated either directly or indirectly to the parameter(s) causing the receiving stream to violate water quality standards and being designated water quality limited; or
- (ii) Total maximum daily loads (TMDLs), waste load allocations (WLAs) load allocations (LAs), and the reserve capacity have been established for the water quality limited receiving stream, compliance plans under which enforcement action can be taken have been

established, and there will be sufficient reserve capacity to assimilate the increased load under the established TMDL at the time of discharge; or

- (iii) Effective July 1, 1996, in water bodies designated water-quality limited for dissolved oxygen, when establishing WLAs under a TMDL for water bodies meeting the conditions defined in this rule, the department may at its discretion provide an allowance for WLAs calculated to result in no measurable reduction of dissolved oxygen (DO). For this purpose, "no measurable reduction" is defined as no more than 0.10 mg/L for a single source and no more than 0.20 mg/L for all anthropogenic activities that influence the water quality limited segment. The allowance applies for surface water DO criteria and for Intergravel dissolved oxygen (IGDO) if a determination is made that the conditions are natural. The allowance for WLAs applies only to surface water 30-day and seven-day means; or
- (iv) Under extraordinary circumstances to solve an existing, immediate and critical environmental problem, the commission or department may, after completing a TMDL but before the water body has achieved compliance with standards, consider a waste load increase for an existing source on a receiving stream designated water quality limited under sub-section (a) of the definition of "Water Quality Limited" in OAR 340-041-0002. This action must be based on the following conditions:
- (I) That TMDLs, WLAs and LAs have been set; and
- (II) That a compliance plan under which enforcement actions can be taken has been established and is being implemented on schedule; and
- (III) That an evaluation of the requested increased load shows that this increment of load will not have an unacceptable temporary or permanent adverse effect on beneficial uses or adversely affect threatened or endangered species; and
- (IV) That any waste load increase granted under subparagraph (iv) of this paragraph is temporary and does not extend beyond the TMDL compliance deadline established for the water body. If this action will result in a permanent load increase, the action must comply with sub-paragraphs (i) or (ii) of this paragraph.
- (b) The activity, expansion, or growth necessitating a new or increased discharge load is consistent with the acknowledged local land use plans as a statement of land use compatibility from the appropriate local planning agency establishes.
- (c) Oregon's water quality management policies and programs recognize that Oregon's water bodies have a finite capacity to assimilate waste. Unused assimilative capacity is an exceedingly valuable resource that enhances in-stream values and environmental quality in general. Allocation of any unused assimilative capacity should be based on explicit criteria. In addition to the conditions in subsection (a) of this section, the commission or department may consider the following:
- (A) Environmental Effects Criteria:

- (i) Adverse Out-of-Stream Effects. There may be instances where the non-discharge or limited discharge alternatives may cause greater adverse environmental effects than the increased discharge alternative. An example may be the potential degradation of groundwater from land application of wastes;
- (ii) Instream Effects. Total stream loading may be reduced through elimination or reduction of other source discharges or through a reduction in seasonal discharge. A source that replaces other sources, accepts additional waste from less efficient treatment units or systems, or reduces discharge loadings during periods of low stream flow may be permitted an increased discharge load year-round or during seasons of high flow, so long as the loading has no adverse effect on threatened and endangered species;
- (iii) Beneficial Effects. Land application, upland wetlands application, or other non-discharge alternatives for appropriately treated wastewater may replenish groundwater levels and increase streamflow and assimilative capacity during otherwise low streamflow periods.
- (B) Economic Effects Criteria. When assimilative capacity exists in a stream, and when it is judged that increased loadings will not have significantly greater adverse environmental effects than other alternatives to increased discharge, the economic effect of increased loading will be considered. Economic effects will be of two general types:
- (i) Value of Assimilative Capacity. The assimilative capacity of Oregon's streams is finite, but the potential uses of this capacity are virtually unlimited. Thus it is important that priority be given to those beneficial uses that promise the greatest return (beneficial use) relative to the unused assimilative capacity that might be utilized. In-stream uses that will benefit from reserve assimilative capacity, as well as potential future beneficial use, will be weighed against the economic benefit associated with increased loading;
- (ii) Cost of Treatment Technology. The cost of improved treatment technology, non-discharge and limited discharge alternatives may be evaluated.

**Statutory/Other Authority:** ORS 468.020, 468B.030, 468B.035 & 468B.048

**Statutes/Other Implemented:** ORS 468B.030, 468B.035 & 468B.048

**History:** 

DEQ 8-2017, f. & cert. ef. 7-18-17 DEQ 2-2007, f. & cert. ef. 3-15-07 DEQ 17-2003, f. & cert. ef. 12-9-03

#### 340-041-0345

Basin-Specific Criteria (Willamette): Water Quality Standards and Policies for this Basin

# [Note: The rule amendment establishes a policy to protect the water quality of Waldo Lake from degradation.]

- (1) pH (hydrogen ion concentration). pH values may not fall outside the following ranges:
- (a) All basin waters, except main stem Columbia River and Cascade lakes: 6.5 to 8.5;
- (b) Cascade lakes above 3,000 feet altitude: 6.0 to 8.5.
- (2) Total Dissolved Solids. Guide concentrations listed may not be exceeded unless DEQ specifically authorizes otherwise upon such conditions as it may deem necessary to carry out the general intent of this plan and to protect the beneficial uses set forth in OAR 340-041-0340: Willamette River and Tributaries 100.0 mg/l.
- (3) Minimum Design Criteria for Treatment and Control of Sewage Wastes:
- (a) Willamette River and tributaries except Tualatin River Subbasin:
- (A) During periods of low stream flows (approximately May 1 to October 31): Treatment resulting in monthly average effluent concentrations not to exceed 10 mg/l of BOD and 10 mg/l of SS or equivalent control;
- (B) During the period of high stream flows (approximately November 1 to April 30): A minimum of secondary treatment or equivalent control and, unless DEQ otherwise specifically authorizes, operating all waste treatment and control facilities at maximum practical efficiency and effectiveness so as to minimize waste discharges to public waters.
- (b) Main stem Tualatin River from mouth to Gaston (river mile 0 to 65):
- (A) During periods of low stream flows (approximately May 1 to October 31): Treatment resulting in monthly average effluent concentrations not to exceed 10 mg/l of BOD and 10 mg/l of SS or equivalent control;
- (B) During the period of high stream flows (approximately November 1 to April 30): Treatment resulting in monthly average effluent concentrations not to exceed 20 mg/l of BOD and 20 mg/l of SS or equivalent control.
- (c) Main stem Tualatin River above Gaston (river mile 65) and all tributaries to the Tualatin River: Treatment resulting in monthly average effluent concentrations not to exceed 5 mg/l of BOD and 5 mg/l of SS or equivalent control;
- (d) Tualatin River Subbasin: The dissolved oxygen level in the discharged effluents may not be less than 6 mg/l;
- (4) Nonpoint source pollution control in the Tualatin River subbasin and lands draining to Oswego Lake:

- (a) Subsection (5)(b) of this rule applies to any new land development within the Tualatin River and Oswego Lake subbasins except those developments with application dates before January 1, 1990. The application date is the date on which the local jurisdiction receives a complete application for development approval as the local jurisdiction's regulations require;
- (b) For land development, no jurisdiction in these subbasins may approve any preliminary plat, site plan, permit, or public works project unless the conditions of the plat permit or plan approval include an erosion control plan containing methods or interim facilities, or both, to be constructed or used concurrently with land development and to be operated during construction to control the discharge of sediment in the stormwater runoff. The erosion control plan must include the following elements:
- (A) Protection techniques to control soil erosion and sediment transport to less than one ton per acre per year, as calculated using the Natural Resources Conservation Service's Universal Soil Loss Equation or other equivalent methods (see Figures 1 to 6 in Appendix 1 for examples). The erosion control plan must include temporary sedimentation basins or other sediment control devices when, because of steep slopes or other site specific considerations, other on-site sediment control methods will not likely keep the sediment transport to less than one ton per acre per year. The local jurisdictions may establish additional requirements for meeting an equivalent degree of control. Any sediment basin constructed must be sized using 1.5 feet minimum sediment storage depth plus 2.0 feet storage depth above for a settlement zone. The storage capacity of the basin must be sized to store all of the sediment that is likely to be transported and collected during construction while the erosion potential exists. When the erosion potential has been removed, the sediment basin, or other sediment control facilities, can be removed and the site restored as per the final site plan. All sediment basins must be constructed with an emergency overflow to prevent erosion or failure of the containment dike; or
- (B) A soil erosion control matrix derived from and consistent with the universal soil equation the jurisdiction or DEQ approves.
- (c) The Director may modify Appendix 1 as necessary without approval from the Environmental Quality Commission. The Director may modify Appendix 1 to simplify it and to make it easier for people to apply;
- (d) Subsection (5)(e) of this rule applies to any new land development within the Tualatin River and Oswego Lake subbasins, except:
- (A) Those developments with application dates before June 1, 1990. The application date is the date on which the local jurisdiction receives a complete application for development approval as that jurisdiction's regulations require;
- (B) One and two family dwellings on existing lots of record;

- (C) Sewer lines, water lines, utilities, or other land development that will not directly increase nonpoint source pollution once construction has been completed and the site is either restored to, or not altered from, its approximate original condition;
- (D) If the Environmental Quality Commission determines that a jurisdiction does not need to require stormwater quality control facilities for new development;
- (E) When a jurisdiction adopts ordinances that provide for a stormwater quality program equivalent to subsection (e) of this section. Ordinances adopted to implement equivalent programs must:
- (i) Encourage on-site retention of stormwater, require phosphorus removal equivalent to the removal efficiency required by subsection (e) of this section, provide for adequate operation and maintenance of stormwater quality control facilities, and require financial assurance, or equivalent security, that assures construction of the stormwater quality control facilities the ordinance requires;
- (ii) If the ordinances provide for exemptions other than those allowed for by paragraphs (B) and (C) of this subsection, the ordinances must provide for collecting in-lieu fees, or other equivalent mechanisms, that assure financing for, and construction of, associated, off-site stormwater quality control facilities. No exemption may be allowed if the jurisdiction is not meeting an approved schedule for identifying location of the off-site stormwater quality control facility to serve the development requesting an exemption.
- (e) For new development, no jurisdiction may approve any plat, site plan, building permit or public works project in these subbasins unless the conditions of the plat, permit, or plan approval require permanent stormwater quality control facilities to control phosphorus loadings associated with stormwater runoff from the development site. Jurisdictions must encourage and provide preference to techniques and methods that prevent and minimize pollutants from entering the storm and surface water systems. Permanent stormwater quality control facilities for phosphorus must meet the following requirements:
- (A) The stormwater quality control facilities must be designed to achieve a phosphorus removal efficiency as calculated from the following equation:

$$Rp = 100 - 24.5/Rv$$

Where:

Rp = Required phosphorus removal efficiency

Rv = Average site runoff coefficient

*The average site runoff coefficient can be calculated from the following equation:* 

$$Rv = (0.7 x A1) + (0.3 x A2) + (0.7 x A3) + (0.05 x A4) + (A5 x 0.0)$$

#### Where:

- A1 = fraction of total area that is paved streets with curbs and that drain to storm sewers or open ditches.
- A2 = fraction of total area that is paved streets that drain to water quality swales located on site.
- A3 = fraction of total area that is building roof and paved parking that drains to storm sewers.
- A4 = fraction of total area that is grass, trees and marsh areas.
- A5 = fraction of total area for which runoff will be collected and retained on site with no direct discharge to surface waters.
- (B) A jurisdiction may modify the equation for Rv to allow applying additional runoff coefficients associated with land surfaces not identified in this subsection. DEQ must be notified in writing whenever an additional runoff coefficient is used. The use of additional runoff coefficients must be based on scientific data. The jurisdiction must discontinue using an additional runoff coefficient if DEQ objects to its use in writing within ten days of receiving notification;
- (C) The stormwater quality control facilities must be designed to meet the removal efficiency specified in paragraph (A) of this subsection for a mean summertime storm event totaling 0.36 inches of precipitation with an average return period of 96 hours;
- (D) The removal efficiency specified in paragraph (A) of this subsection specify only design requirements and are not intended to be used as a basis for performance evaluation or compliance determination of the stormwater quality control facility installed or constructed pursuant to this subsection;
- (E) A jurisdiction may approve stormwater quality control facilities this subsection requires only if the following are met:
- (i) For developments larger than one acre, the plat or site plan must include plans and a certification prepared by an Oregon registered, professional engineer, that the proposed stormwater control facilities have been designed in accordance with criteria expected to achieve removal efficiencies for total phosphorus required by paragraph (A) of this subsection;
- (ii) The plat or site plan must be consistent with the area and associated runoff coefficients used to determine the removal efficiency required in paragraph (A) of this subsection;
- (iii) The developer must provide a financial assurance, or equivalent security acceptable to the jurisdiction, with the jurisdiction that assures that the stormwater control facilities are

constructed according to the plans established in the plat or site plan approval. Where practicable, the jurisdiction must combine the financial assurance this rule requires with other financial assurance requirements imposed by the jurisdiction;

- (iv) Each jurisdiction that constructs or authorizes construction of permanent stormwater quality control facilities must file with DEQ an operation and maintenance plan for the stormwater quality control facilities within its jurisdiction. The operation and maintenance plan must allow for public or private ownership, operation, and maintenance of individual permanent stormwater quality control facilities. The jurisdiction or private operator must operate and maintain the permanent stormwater control facilities as the operation and maintenance plan specifies.
- (f) Except as paragraph (D) of this subsection requires, the jurisdiction may grant an exception to subsection (e) of this section if the jurisdiction chooses to adopt and, on a case-by-case basis, impose a one time in-lieu fee. The fee will be an option where, because of the size of the development, topography, or other factors, the jurisdiction determines that the construction of on-site permanent stormwater treatment systems is impracticable or undesirable:
- (A) The in-lieu fee will be based upon a reasonable estimate of the current, prorated cost for the jurisdiction to provide stormwater quality control facilities for the land development being assessed the fee. Estimated costs include costs associated with off-site land and rights-of-way acquisition, design, construction, and construction inspection;
- (B) The jurisdiction must deposit any in-lieu fees collected under this paragraph in an account dedicated only to reimbursing the jurisdiction for expenses related to off-site land and rights-of-way acquisition, design, construction, and construction inspection of stormwater quality control facilities;
- (C) The ordinance establishing the in-lieu fee must include provisions that reduce the fee in proportion to the ratio of the site's average runoff coefficient (Rv), as established according to the equation in paragraph (6)(e)(A) of this rule;
- (D) No new development may be granted an exemption if the jurisdiction is not meeting an approved time schedule for identifying the location for the off-site stormwater quality control facilities that would serve that development.
- (g) DEQ may approve other mechanisms that allow jurisdictions to grant exemptions to new development. DEQ may only approve those mechanisms that assure financing for off-site stormwater quality control facilities and that encourage or require on-site retention where feasible;
- (h) Subsection (b) of this section applies until a jurisdiction adopts ordinances that provide for a program equivalent to subsection (b) of this section, or the Environmental Quality Commission determines such a program is not necessary when it approves the jurisdiction's program plan required by OAR 340-041-0470(2)(g).

- (5) In order to improve water quality within the Yamhill River subbasin to meet the existing water quality standard for pH, the following special rules for total maximum daily loads, waste load allocations, load allocations and program plans are established:
- (a) After wastewater control facilities and program plans the EQC approved under this rule are completed, and no later than June 30, 1994, no activities may be allowed, and no wastewater may be discharged to the Yamhill River or its tributaries, without the EQC's authorization, that cause the monthly median concentration of total phosphorus to exceed 70 ug/1 as measured during the low flow period between approximately May 1 and October 31 of each year;

[NOTE: DEQ may condition precise dates for complying with this rule on the receiving water's physical conditions (i.e., flow temperature). DEQ may specify the compliance dates in individual permits or memorandums of understanding. DEQ may consider design flows, river travel times, and other relevant information, when establishing the specific conditions it inserts in the permits or memorandums of understanding.]

- (b) Within 90 days of adoption of these rules, the Cities of McMinnville and Lafayette must submit a program plan and time schedule to DEQ describing how and when they will modify their sewerage facility to comply with this rule;
- (c) The commission will review and approve final program plans. The commission may define alternative compliance dates as program plans are approved. All proposed final program plans must be subject to public hearing before the commission considers them for approval;
- (d) DEQ will, within 60 days of adoption of these rules, distribute initial waste load allocations and load allocations to the point and nonpoint sources in the basin. These allocations are considered interim and may be redistributed based upon the conclusions of the approved program plans.
- (6) Multiple Discharger Variance for Mercury. The following rule is a multiple discharger variance to the fish-tissue based human health criterion for methylmercury. The variance applies to the following facilities:

Albany-Millersburg WRF (Willamette River); Canby STP (Willamette River); Cascade Pacific – Halsey Mill (Willamette River); City of Molalla (Molalla River); City of Portland Tryon Creek WWTP (Willamette River); City of Sandy (Tickle Creek); Clean Water Services Durham STP (Tualatin River); Clean Water Services Forest Grove STP (Tualatin River), Clean Water Services Rock Creek STP (Tualatin River); Corvallis STP (Willamette River), Cottage Grove STP (Coast Fork Willamette River); Dallas STP (Rickreall Creek); Georgia-Pacific Halsey Mill (Willamette River); Gervais STP (Pudding River); International Paper Springfield Paper Mill (McKenzie River); Kellogg Creek WWTP (Willamette River); Lebanon WWTP (South Santiam River); McMinnville WRF (South Yamhill River); Metropolitan Wastewater Management Commission Eugene/Springfield STP (Willamette River); Newberg STP

(Willamette River); Oak Lodge Services WRF (Willamette River); Saint Helens/Boise Cascade STP (Multnomah Channel); Salem Willow Lake STP (Willamette River); Siltronic Corporation (Willamette River); Silverton STP (Silver Creek); Stayton STP (North Santiam River); Sweet Home STP (South Santiam River); Teledyne Wah Chang (Willamette River); Tri-City Service District – Blue Heron (Willamette River); Tri-City Water Pollution Control Plant (Willamette River); West Linn Paper Company (Willamette River); Westrock, Newberg Mill (Willamette River); Wilsonville STP (Willamette River); Woodburn WWTP (Pudding River);

The variance will also apply to any of the following facilities for which DEQ would otherwise be required to establish mercury effluent limits during the term of the variance:

Amity STP (Salt Creek); Aumsville STP (Beaver Creek); Brooks STP (Willamette River); Brownsville STP (Calapooia River); Carlton STP (North Yamhill River); City of Estacada (Clackamas River); City of Scappoose (Multnomah Channel); Coburg WWTP (Unnamed tributary to Muddy Creek); Creswell STP (Unnamed tributary to Camas Swale Creek); Dayton STP (Yamhill River); Dundee STP (Willamette River); Halsey STP (Muddy Creek); Harrisburg Lagoon Treatment Plant (Willamette River); Hubbard STP (Mill Creek); Independence STP (Middle Willamette River); Jefferson STP (Santiam River); Junction City STP (Flat Creek); Lafayette STP (Yamhill River); Lane Community College (Russel Creek); Lowell STP (Middle Fork Willamette River); Monmouth STP (Willamette River); Mt. Angel STP (Pudding River); Oakridge STP (Middle Fork Willamette River); Philomath STP (Mary's River); Tangent STP (Calapooia River); Sheridan STP (South Yamhill River); USDA Forest Service (Clackamas River); Veneta STP (Long Tom River); Willamina STP (South Yamhill River); Yamhill STP (North Yamhill River).

- (a) Findings. The EQC finds the following:
- (A) The fishing use and fish-tissue based human health criterion for methyl-mercury cannot be attained within the next 20 years due to mercury from atmospheric deposition and naturally occurring mercury in native soils. Neither the sources of mercury nor the processes by which the mercury is transported to waterbodies can be remedied to meet the underlying designated use and criterion within the next 20 years.
- (B) There is no currently feasible mercury treatment technology that would result in achieving water quality-based effluent limits based on the human health criterion for mercury.
- (C) The requirements of the variance will not result in degrading the currently attained ambient water quality for methyl-mercury in the Willamette Basin.
- (b) Term of the variance. The term of this variance is 20 years from the date of EPA approval.
- (c) Application requirements. To implement the variance, a facility must provide to DEQ the following information:

- (A) All mercury effluent data from the previous five years, including a minimum of two years of quarterly effluent data.
- (B) A facility-specific mercury minimization program with minimum elements described in subsection (6)(f) of this rule for municipal facilities or subsection (6)(g) of this rule for industrial facilities.
- (d) Highest attainable condition. Permit requirements will reflect the highest attainable condition specified in this variance. The highest attainable condition for this variance is the level currently achievable, as described in subsection (6)(e) below, for all dischargers, and a requirement to develop and implement a mercury minimization program with elements described in subsection (6)(f) of this rule for municipal dischargers and subsection (6)(g) of this rule for industrial dischargers.
- (e) Highest attainable condition level currently achievable (LCA). The highest attainable condition for all facilities covered under this variance will include the level currently achievable. This is a quantifiable expression of the effluent condition achievable with the pollutant control technologies in place at the time this variance is granted when those technologies are well maintained and operated. The LCA for this variance is the 95th percentile value of recent (e.g., two to five years) total mercury effluent data or a previously applicable LCA, whichever is lower.
- (f) Highest attainable condition mercury minimization program for municipal dischargers. The highest attainable condition for municipal dischargers will include implementing a mercury minimization program covering the term of the variance, which must contain the following minimum elements:
- (A) A monitoring plan to include influent, effluent and biosolids monitoring;
- (B) Regulating dental offices to ensure installation and maintenance of amalgam separators, including inspection of dental facilities for proper management and disposal of dental waste;
- (C) Identifying mercury-containing materials at facilities and offices each municipal wastewater treatment facility operates and implementing any recommendations for removing mercury-containing materials;
- (D) Identifying and inspecting commercial laboratories, schools and healthcare facilities that may have mercury and providing recommendations and outreach materials to these facilities;
- (E) Distributing outreach materials to commercial and residential sectors;
- (F) Evaluating new facilities as potential sources of mercury, regulatory oversight of such sources of mercury under the municipality's pre-treatment program where such sources are significant industrial users, and outreach to provide recommendations on activities that would reduce mercury in the facilities' discharges. Priority facilities should include those in the

timber, paper, glass, clay, cement, concrete, gypsum, primary and fabricated metal, and electronic instrument sectors;

- (G) Cleanup of legacy mercury from collection systems;
- (H) Facility-specific activities to reduce mercury loading into the waterbody. These may include cost-effective and reasonable best management practices for nonpoint source controls under the control of the discharger that would make progress towards attaining the underlying designated use and criterion; and
- (I) If a facility has accomplished all activities within its control, the facility may implement or fund mercury reduction activities outside the discharger's control that will make progress toward attaining the underlying designated use and criterion.
- (g) Highest attainable condition mercury minimization program for industrial dischargers. The highest attainable condition for industrial dischargers will include implementing a mercury minimization program covering the term of the variance, with the following minimum elements:
- (A) A monitoring plan to include influent, effluent and biosolids monitoring;
- (B) Identifying mercury-containing materials used in the facility, offices and testing laboratories the discharger operates, and developing and implementing recommendations for using substitute materials with less or no mercury;
- (C) Identifying other potential sources of mercury within the facility and developing and implementing recommendations for reducing these sources;
- (D) Identifying other activities within discharger's control discharger to reduce mercury loading into the waterbody. These may include cost-effective and reasonable best management practices for nonpoint source controls under the discharger's control that would make progress towards attaining the underlying designated use and criterion; and
- (E) If a facility has accomplished all activities within its control, the facility may implement or fund mercury reduction activities outside the discharger's control that will make progress toward attaining the underlying designated use and criterion.
- (h) State mercury reduction activities in Oregon. The state implements numerous programs that will, over time, including over the 20-year term of this variance, reduce mercury loads to Willamette Basin waterbodies, including such programs as:
- (A) Oregon's Dental Amalgam Law and associated practices as required under ORS 679.520 and ORS 679.525, and subsequent federal regulations.

- (B) Airborne toxic contaminant reduction from existing or newly permitted industrial sources through the Cleaner Air Oregon program and other DEQ Air Quality permitting requirements.
- (C) DEQ coordination with the Oregon Department of Forestry on implementing the Forest Practices Act.
- (D) DEQ coordination with the Oregon Department of Agriculture on implementing the Oregon Agriculture Water Quality Management Act.
- (E) DEQ issuing general discharge permits, such as Phase I and Phase II municipal separate storm sewer system permits, industrial stormwater permits, and suction dredge mining permits, in addition to individual wastewater discharge permits.
- (F) DEQ in-water and upland remediation under state laws and rules, and coordination with US EPA on Portland Harbor, Gould, and Black Butte Mine Superfund site cleanups.
- (G) Regulatory and voluntary programs to reduce or recycle products containing mercury, such as automotive light switches, thermostats, and LCD screens and monitors.
- (i) Re-evaluating the Highest Attainable Condition. DEQ will re-evaluate the highest attainable condition for this multiple discharger variance every five years from the date that EPA approves this variance. DEQ will provide a written summary of this re-evaluation to EPA within 30 days of completing the re-evaluation. If DEQ fails to submit the re-evaluation to EPA within the specified timeframe, the variance will no longer be the applicable water quality standard until DEQ completes the re-evaluation and submits it to EPA.
- (A) The re-evaluation will include the following elements:
- (i) A summary of the mercury reduction activities completed and an analysis of mercury reductions facilities covered under this variance achieved, using the data and information provided in their annual reports; and
- (ii) A determination of the feasibility of wastewater treatment technology to attain the water quality standard.
- (B) DEQ will provide public notice on the availability of its draft re-evaluation and provide at least 30 days opportunity for the public to comment on the draft re-evaluation.
- (C) Upon permit renewal for each facility covered under the variance, DEQ will update conditions in the permit based on the re-evaluation of the Highest Attainable Condition, as follows:
- (i) DEQ will re-calculate each facility's level currently achievable, as described in OAR 340-041-0345(6)(e), utilizing the previous five years of data provided by each facility, at the time

of their permit renewal. DEQ will adjust permit limits if the data shows that the level currently achievable is lower than the LCA in the previous permit.

- (ii) DEQ will review updates to the facility's site-specific mercury minimization plan and, if necessary, request revisions to ensure that it is consistent with variance requirements.
- (7) Outstanding Resource Waters of Oregon (ORWs)
- (a) Waldo Lake and associated wetlands.
- (b) The current high water quality, exceptional ecological values, and existing and designated uses of the ORWs identified in this rule ("these waters") shall be maintained and protected except as altered by natural causes.
- (c) No new NPDES discharge or expansion of an existing discharge to these waters shall be allowed.
- (d) No new NPDES discharge or expansion of an existing discharge to waters upstream of or tributary to these waters shall be allowed if such discharge would significantly degrade the water quality within these waters.
- (e) No activities shall be allowed that would degrade the existing water quality and ecological characteristics and values of these waters.

**Statutory/Other Authority:** ORS 468.020, 468B.030, 468B.035 & 468B.048 **Statutes/Other Implemented:** ORS 468B.030, 468B.035 & 468B.048

**History:** 

DEQ 4-2020, minor correction filed 01/27/2020, effective 01/27/2020

DEQ 3-2020, amend filed 01/24/2020, effective 01/24/2020

DEQ 13-2019, amend filed 05/16/2019, effective 05/16/2019

DEQ 38-2018, minor correction filed 04/02/2018, effective 04/02/2018

DEQ 2-2007, f. & cert. ef. 3-15-07 DEQ 17-2003, f. & cert. ef. 12-9-03

#### 340-041-0185

Basin-Specific Criteria (Klamath): Water Quality Standards and Policies for this Basin

[Note: The rule amendment establishes a policy to protect the water quality of Crater Lake from degradation.]

- (1) pH (hydrogen ion concentration). pH values may not fall outside the following ranges:
- (a) Fresh waters except Cascade lakes: pH values may not fall outside the range of 6.5-9.0. When greater than 25 percent of ambient measurements taken between June and September

are greater than pH 8.7, and as resources are available according to priorities set by the Department, the Department will determine whether the values higher than 8.7 are anthropogenic or natural in origin;

- (b) Cascade lakes above 5,000 feet altitude: pH values may not fall outside the range of 6.0 to 8.5.
- (2) Temperature. From June 1 to September 30, no NPDES point source that discharges to the portion of the Klamath River designated for cool water species may cause the temperature of the water body to increase more than 0.3°C above the natural background after mixing with 25% of the stream flow. Natural background for the Klamath River means the temperature of the Klamath River at the outflow from Upper Klamath Lake plus any natural warming or cooling that occurs downstream. This criterion supersedes OAR 340-041-0028(9)(a) during the specified time period for NPDES permitted point sources.
- (3) Total Dissolved Solids. Guide concentrations listed below may not be exceeded unless otherwise specifically authorized by DEQ upon such conditions as it may deem necessary to carry out the general intent of this plan and to protect the beneficial uses set forth in OAR 340-041-0180: main stem Klamath River from Klamath Lake to the Oregon-California Border (river miles 255 to 208.5): The specific conductance may not exceed 400 micro-ohms at 77°F when measured at the Oregon-California Border (river mile 208.5).
- (4) Minimum Design Criteria for Treatment and Control of Sewage Wastes:
- (a) During periods of low streams flows (approximately May 1 to October 31): Treatment resulting in monthly average effluent concentrations not to exceed 20 mg/l of BOD and 20 of suspended solids or equivalent control;
- (b) During the period of high stream flows (approximately November 1 to April 30): A minimum of secondary treatment or equivalent control and unless otherwise specifically authorized by the Department, operation of all waste treatment and control facilities to maximum practicable efficient and effectiveness so as to minimize waste discharge to public waters.
- (5) Time Schedule for Dam Removal.
- (a) DEQ may issue a 401 Water Quality Certification for the federal license or permit authorizing the removal of J.C. Boyle Dam on the Klamath River that includes a time schedule for compliance with water quality standards, if DEQ makes the following findings:
- (A) The dam removal and its associated water quality impacts will be of limited duration;
- (B) The dam removal and related restoration activities will provide a net ecological benefit;

- (C) The dam removal will be performed in a manner minimizing, to the maximum extent practicable, adverse impacts to water quality, threatened and endangered species, and beneficial uses of the Klamath River; and
- (D) The dam removal, by the end of a specified time schedule, is not expected to cause an exceedance of a water quality standard set forth in this Division.
- (b) Any 401 Water Quality Certification issued by DEQ for removal of J.C. Boyle Dam must:
- (A) Be based on an application, evaluation, and public participation complying with OAR chapter 340 division 48; and
- (B) Contain conditions ensuring that the dam removal:
- (i) Will be performed in accordance with interim milestones and a time schedule specified in the certification;
- (ii) Will be performed in a manner that, to the maximum practicable extent, minimizes adverse impacts to water quality, threatened and endangered species, and beneficial uses of the Klamath River (including the use of best practices and interim and post-removal protection, mitigation, and monitoring measures); and
- (iii) Will not cause an exceedance of a water quality standard set forth in this Division by the end of the maximum period for meeting standards specified in the certification.
- (6) Outstanding Resource Waters of Oregon (ORWs)
- (a) Crater Lake
- (b) The current high water quality, exceptional ecological values, and existing and designated uses of Crater Lake shall be maintained and protected, except if altered by causes beyond the control of park management.
- (c) No new NPDES discharge or increase of an existing NPDES discharge to Crater Lake shall be allowed, except construction stormwater permits for limited duration projects.
- (d) Activities in and on Crater Lake and in the watershed shall be managed to protect and maintain the existing water quality of Crater Lake, except on a short-term basis to respond to public health and welfare emergencies, or to obtain long-term restoration or water quality improvements.
- (e) The Environmental Quality Commission acknowledges the mandate of Crater Lake National Park to also manage the park for the purpose of providing public access and enjoyment.

**Statutory/Other Authority:** ORS 468.020, 468B.030, 468B.035 & 468B.048

**Statutes/Other Implemented:** ORS 468B.030, 468B.035 & 468B.048

**History:** 

DEQ 2-2012, f. & cert .ef. 5-21-12 DEQ 1-2007, f. & cert. ef. 3-14-07 DEQ 17-2003, f. & cert. ef. 12-9-03