Preliminary Regulatory Analyses:

Including the:

- Preliminary Cost-Benefit Analysis
- Least-Burdensome Alternative Analysis
- Administrative Procedure Act Determinations
- Regulatory Fairness Act Compliance

Chapter 173-201A WAC

Water Quality Standards for Surface Waters of the State of Washington

By

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For the

Water Quality Program

Washington State Department of Ecology

Olympia, Washington

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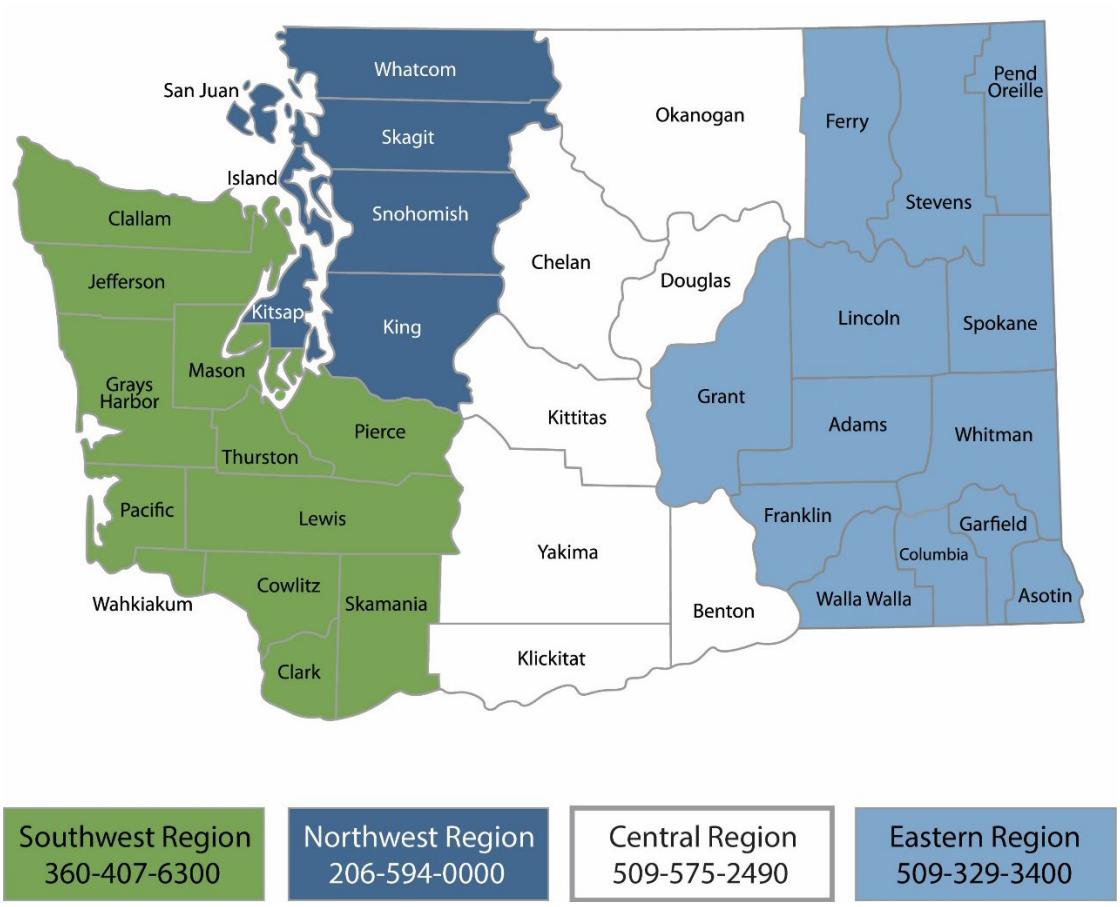
Department of Ecology's Regional Offices

Map of Counties Served



Region	Counties served	Mailing Address	Phone
Southwest	Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Mason, Lewis, Pacific, Pierce, Skamania, Thurston, Wahkiakum	P.O. Box 47775 Olympia, WA 98504	360-407-6300
Northwest	Island, King, Kitsap, San Juan, Skagit, Snohomish, Whatcom	P.O. Box 330316 Shoreline, WA 98133	206-594-0000
Central	Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima	1250 W Alder St Union Gap, WA 98903	509-575-2490
Eastern	Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman	4601 N Monroe Spokane, WA 99205	509-329-3400
Headquarters	Across Washington	P.O. Box 46700 Olympia, WA 98504	360-407-6000

Preliminary Regulatory Analyses

Including the:

Preliminary Cost-Benefit Analysis

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Chapter 173-210A WAC, Water Quality Standards for Surface Waters of the State of Washington

Water Quality Program
Washington State Department of Ecology

Olympia, WA

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DEPARTMENT OF
ECOLOGY
State of Washington

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Abbreviations

APA	Administrative Procedure Act
CBA	Cost-Benefit Analysis
CFR	Code of Federal Regulations
CWA	Clean Water Act
WDNR	Washington Department of Natural Resources
EPA	Environmental Protection Agency
LBA	Least-Burdensome Alternative Analysis
ORW	Outstanding Resource Waters
RCW	Revised Code of Washington
RFA	Regulatory Fairness Act
SWQS	Surface Water Quality Standards
WAC	Washington Administrative Code
WRIA	Water Resource Inventory Area

Executive Summary

This report presents the determinations made by the Washington State Department of Ecology as required under Chapters 34.05 RCW and 19.85 RCW, for the proposed amendments to the Water Quality Standards for Surface Water of the State of Washington rule (Chapter 173-201A WAC; the "rule"). This includes the:

- Preliminary Cost-Benefit Analysis (CBA)
- Least-Burdensome Alternative Analysis (LBA)
- Administrative Procedure Act Determinations
- Regulatory Fairness Act Compliance

The Washington Administrative Procedure Act (APA; RCW 34.05.328(1)(d)) requires Ecology to evaluate significant legislative rules to "determine that the probable benefits of the rule are greater than its probable costs, taking into account both the qualitative and quantitative benefits and costs and the specific directives of the law being implemented." Chapters 1 – 5 of this document describe that determination.

The APA also requires Ecology to "determine, after considering alternative versions of the rule…that the rule being adopted is the least burdensome alternative for those required to comply with it that will achieve the general goals and specific objectives" of the governing and authorizing statutes. Chapter 6 of this document describes that determination.

The APA also requires Ecology to make several other determinations (RCW 34.05.328(1)(a) – (c) and (f) – (h)) about the rule, including authorization, need, context, and coordination. Appendix A of this document provides the documentation for these determinations.

The Washington Regulatory Fairness Act (RFA; Chapter 19.85 RCW) requires Ecology to evaluate the relative impact of proposed rules that impose costs on businesses in an industry. It compares the relative compliance costs for small businesses to those of the largest businesses affected. Chapter 7 of this document documents that analysis, when applicable.

All determinations are based on the best available information at the time of publication. We encourage feedback (including specific data) that may improve the accuracy of this analysis.

Proposed rule amendments

The proposed rule amendments would make the following changes:

- Adding the definition of "Outstanding resource waters."
    - "Outstanding resource waters" are high quality waters designated by the state due to their exceptional water quality, ecological or recreational significance, unique habitat, or cold-water refuge. Outstanding resource waters are given the highest level of protection under the state Antidegradation policy.
- Designating four waterbodies as outstanding resource waters.
    - Tier III(A) outstanding resource waters:

        - Cascade River and tributaries within the designation boundary (Upstream from the west boundary of Mount Baker Snoqualmie National Forest).
        - Green River and tributaries within the designation boundary (Upstream from the boundary of the Gifford Pinchot National Forest).[2]
        - Napeequa River and tributaries within the designation boundary (Upstream from the boundary of the Okanogan-Wenatchee National Forest and private land near river mile 1).
    - Tier III(B) outstanding resource waters:
        - Soap Lake

- Expanding tribal consultation to align with current practice, to support proposed ORW designations and statewide interest in ORW protections.
    - In WAC 173-201A-330, the proposed amendments would delete "recognized" and "in the geographic vicinity of the water" from the sentence "The review will include a public process and consultation with recognized tribes in the geographic vicinity of the water" to reflect a more accurate description of Ecology's consultation policy. Ecology does not limit our invitation for consultation to recognized tribes, nor just to those in the vicinity of the water.
- Creating a new section listing waterbodies designated as ORWs.
    - Adding WAC 173-201A-332 Table 332- Outstanding Resource Water designations by water resource inventory area (WRIA). Table 332 lists waterbodies designated as Tier III(A) or Tier III(B) outstanding resource waters.
    - Adding notes for the Soap Lake ORW designation in the table:
        - Soap Lake measurable change is defined as a decrease in salinity as measured by conductivity of 639 microsiemens per centimeter (µS/cm) or greater.
        - In addition, human actions must not cause lake conductivity to decrease below 19,843 µS/cm as calculated as an annual average more than once in 10 years.
        - Annual average conductivity is calculated as the arithmetic average of seven or more samples collected April through October. Sampling should be distributed throughout this period.
- Making two minor changes in Table 602 to note the proposed ORW designations.
    - WAC 173-201A-602: Added a note to Cascade River and Boulder Creek as reference that this waterbody or portions thereof has an ORW designation in Table 602: WRIA 4 - Upper Skagit.

[2] Upstream from the west section line of Section 17, Township 10 North, Range 06 East.

- WAC 173-201A-602: Added a note to Green River as reference that this waterbody or portions thereof has an ORW designation in Table 602: WRIA 26 – Cowlitz.

Reasons for the proposed rule amendments

Ecology received nominations to designate four water bodies as ORWs. Ecology collected information from local tribes and stakeholders, the U.S. Forest Service, and the National Parks Service about priorities and implementation strategies for managing and protecting the high-water quality and values for each nominated waterbody.

Ecology also met with local officials, including the Soap Lake City Council, the Skagit County Commissioners, the Skamania County Commissioners, Grant County Commissioners, and the Chelan County Natural Resources Director, to discuss implementation questions and concerns for this rulemaking. Based on the nominations, waterbody attributes, and stakeholder and local government outreach, Ecology decided to proceed with the proposed rule amendments to designate these waterbodies as ORWs.

Costs and benefits of the proposed rule amendments

We did not identify immediate or likely future impacts associated with the proposed rule amendments, as implementation of baseline laws and rules is likely to be protective of the proposed ORW-designated waters under likely current and future circumstances. We base this determination on current activities identified for each waterbody and surrounding lands, in conjunction with existing permitting requirements, federal and state laws and rules, and local regulations. We also identified potential development scenarios and broader trends in activities that could occur in the proposed ORW areas.

The proposed rule amendments could affect activities in unlikely or unforeseen circumstances if baseline requirements are not sufficiently protective of the outstanding qualities of the proposed ORW-designated waterbodies. Such circumstances could include:

- Activities that affect inflow or water removal from Soap Lake in a way that affects salinity and is not prevented by state and local baseline regulations and permit requirements.
- Activities that create runoff to proposed ORW-designated rivers, of substances not covered by baseline water quality or land use regulations and permit requirements, where runoff is not mitigated by actions otherwise required in permit.
- Changes to baseline requirements at the federal level, affecting management of federal lands and associated environmental protections.

Likely costs

In the exceptional circumstances listed above, the proposed rule amendments could result in a permittee being required to do additional monitoring for permitted activities.

They could also result in:

- An Ecology investigation of degradation sources under the baseline requirements and procedures to identify potential human causes.
- Technical assistance in compliance.

Based on our understanding of baseline regulations and activities, we could not confidently forecast likely and specific circumstances and quantify these costs.

Likely benefits

As discussed above, the proposed rule amendments are unlikely to affect current and foreseeable activities in the proposed ORW-designated areas, as baseline requirements are likely to be protective of ORW attributes in current and likely future circumstances. In the exceptional circumstances, with possible additional compliance requirements, discussed above, the proposed rule amendments would generate benefits of additional protection of environmental values associated with ORWs, including incremental values of:

- Relatively pristine or exceptional quality waters and quality of withdrawals.
- Recreational values.
- Fish and wildlife values, including for endangered or threatened species and unique organisms.
- Cultural and use values for tribes.
- Educational and scientific values.

By creating state-controlled protections over and above the baseline for exceptional circumstances, the proposed rule amendments would also mitigate risk of changes to baseline requirements that are out of Washington's and Washingtonians' control. These risks include potential future administrative or court decisions that affect the level or scope of federal protections in ORW-designated areas.

Determination

We conclude, based on a reasonable understanding of the quantified and qualitative costs and benefits likely to arise from the proposed rule amendments, as compared to the baseline, that the benefits of the proposed rule amendments are greater than the costs.

Least-burdensome alternative

The authorizing statute for this rule is Chapter 90.48 RCW, Water Pollution Control. Its goals and objectives include the state of Washington's policy of maintaining the highest possible standards to ensure the purity of all waters of the state consistent with public health, public enjoyment, the protection of wildlife, and the industrial development of the state. This requires the use of all known available and reasonable methods to prevent and control the pollution of the waters of the state of Washington.

RCW 90.48.035, Rule-making authority, specifically authorizes Ecology to promulgate, amend, or rescind rules and regulations as deemed necessary to maintain the highest possible standards of all waters in the state. Its goals and objectives include but are not limited to rules

relating to standards of quality of waters of the state and regulating substances discharged into them.

We considered the following alternative rule content and did not include it in the proposed rule amendments for the reasons discussed in the subsection below.

- Not designating the Cascade River as an ORW.

After considering alternatives to the proposed rule's contents, within the context of the goals and objectives of the authorizing statute, we determined that the proposed rule represents the least-burdensome alternative of possible rule contents meeting the goals and objectives.

Regulatory Fairness Act compliance

The Regulatory Fairness Act (RFA; RCW 19.85.070) requires Ecology to perform a set of analyses and make certain determinations regarding the proposed rule amendments. We assessed the compliance costs of the proposed rule amendments (see Chapter 3) and did not identify any necessary changes in compliance behavior by any identified business. We determined that Ecology is exempt from performing additional analyses under RCW 19.85.025(4), which states, "This chapter does not apply to the adoption of a rule if an agency is able to demonstrate that the proposed rule does not affect small businesses." Similarly, the proposed rule amendments do not meet the criteria for the requirement to prepare a Small Business Economic Impact Statement under RCW 19.85.030(1)(a), which states, "In the adoption of a rule under chapter 34.05 RCW, an agency shall prepare a small business economic impact statement: (i) If the proposed rule will impose more than minor costs on businesses in an industry."

We examined the set of landowners around the proposed ORW-designated waterbodies, including nine business locations.[3, 4] We also identified a special permit holder for annual hydroplane races on Soap Lake.[5] As these businesses have not been identified as affecting current qualities of the proposed ORWs, we do not expect their activities to be impacted by the proposed rule amendments.[6] We expect any likely future business expansion or development to be regulated by baseline laws and rules, and similarly not incur additional compliance costs under the proposed rule amendments. The amendments would protect the exceptional qualities of the proposed ORWs largely in cases of unexpected developments or changes to the regulatory baseline.

[3] Grant County, 2023. TerraScan Mapsifter. https://grantwa-mapsifter.publicaccessnow.com/defaultHTML5.aspx
[4] RFA requirements do not apply to government entities or private parties.
[5] WA Department of Ecology, 2023. Proposed Outstanding Resource Waters Designations for Soap Lake and Portions of the Cascade, Napeequa, and Green Rivers. Technical Support Document. July 2023.
[6] We note that the WA Department of Natural Resources cannot prohibit public trust activities (including boating) as the authorizing authority for access to Soap Lake, but can place conditions on the activity (e.g., placement of buoys).

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Chapter 1: Background and Introduction

1.1 Introduction

This report presents the determinations made by the Washington State Department of Ecology as required under Chapters 34.05 RCW and 19.85 RCW, for the proposed amendments to the Water Quality Standards for Surface Water of the State of Washington rule (Chapter 173-201A WAC; the "rule"). This includes the:

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All determinations are based on the best available information at the time of publication. We encourage feedback (including specific data) that may improve the accuracy of this analysis.

1.1.1 Background

On April 2, 2021, the Soap Lake Conservancy and the Confederated Tribes of the Colville Reservation nominated Soap Lake as a Tier III(B) outstanding resource water (ORW). On June 24, 2021, several organizations, including the Pew Charitable Trusts, American Rivers, Cascade Forest Conservancy, Wild Salmon Center, American Whitewater, Washington Wild, and Trout Unlimited nominated portions of the Cascade River, Napeequa River, Green River, and their tributaries, as Tier III(A) ORWs. This is the first time that Ecology has received nominations for ORW designations.

ORWs are high-quality waters designated by the state due to their exceptional water quality, ecological or recreational significance, unique habitat, or cold-water refuge. ORWs can be designated as a Tier III(A) or Tier III(B) water under WAC 173-201A-330. Tier III(A) prohibits any and all future degradation, and Tier III(B) allows only de minimis (below measurable amounts) under certain conditions.

To be eligible for consideration as an ORW in Washington, a waterbody must meet one or more of the following eligibility criteria listed under WAC 173-201A-330(1):

- Relatively pristine or possessing exceptional water quality and in a protected area such as a state or federal park, monument, preserve, wilderness area, or wild and scenic river designation.
- Unique aquatic habitat types that are not considered high water quality by conventional standards, such as dissolved oxygen, temperature, or sediment, but are unique and regionally rare.
- High water quality and regionally unique recreational value.
- Exceptional statewide ecological significance.
- Cold water thermal refuges critical to the protection of aquatic life.

The purpose of these proposed rule amendments is to designate these ORWs under Chapter 173-201A WAC, Water Quality Standards for Surface Waters of the State of Washington (Standards).

The proposed rule amendments would designate the following waterbodies as Tier III(A) ORW**:**

- **Cascade River and tributaries (upper watershed; Skagit County):** The Cascade River is entirely located within Skagit county. It flows through lands historically inhabited by the Upper Skagit and Sauk-Suitattle Tribes. The river is a tributary of the Skagit River and merges with it at the town of Marblemount.

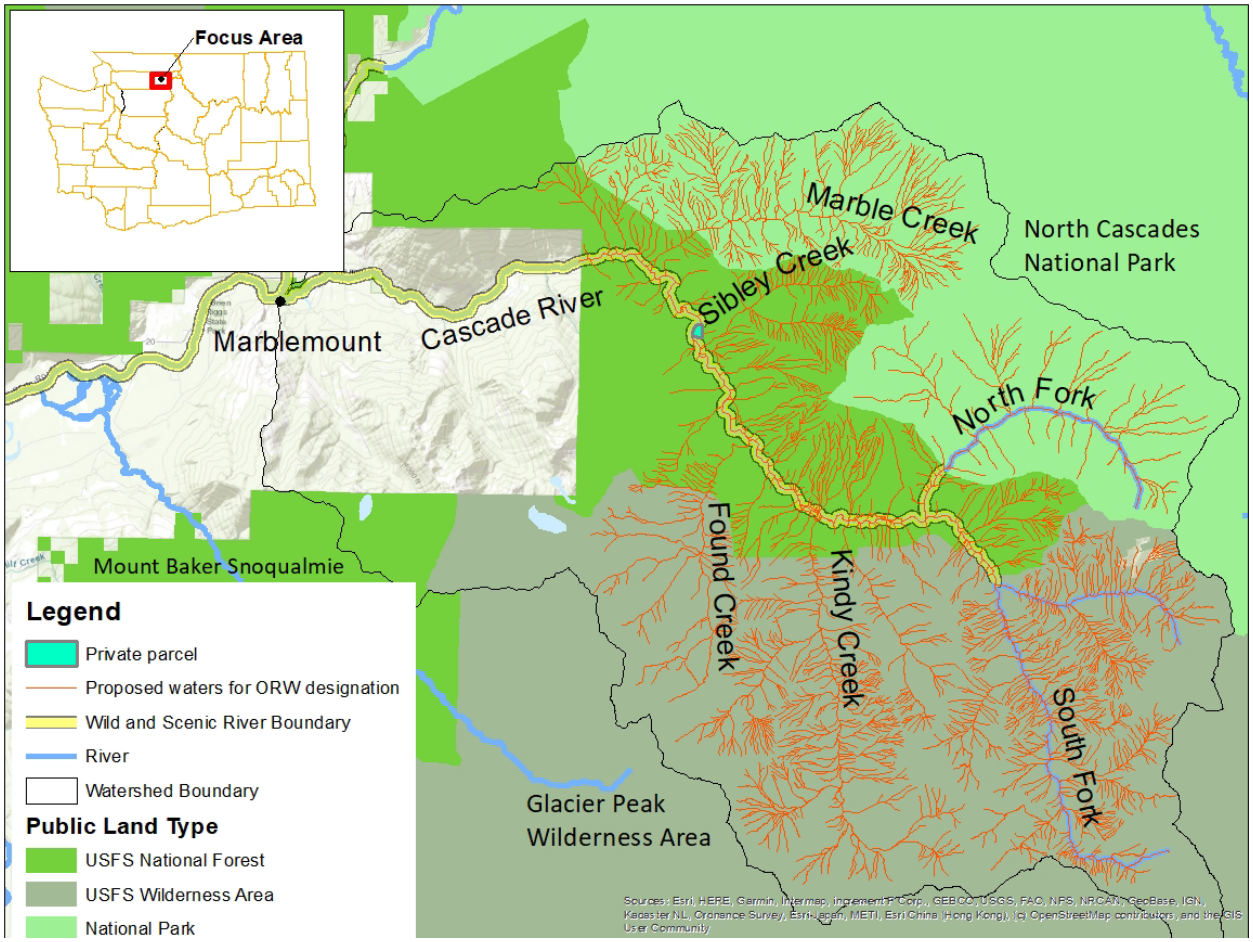

Figure 1. Proposed outstanding resource water designation for the Cascade River and tributaries.

The Cascade River meets the following eligibility criteria as an ORW in WAC 173-201A-330(1):

- The water is in a relatively pristine condition (largely absent human sources of degradation) or possesses exceptional water quality, and also occurs in federal and state parks, monuments, preserves, wildlife refuges, wilderness areas, marine sanctuaries, estuarine research reserves, or wild and scenic rivers.
- The water has both high water quality and regionally unique recreational value.
- The water is of exceptional statewide ecological significance.

- **Green River and tributaries (upper watershed, Skamania County):** The Green River is part of the Cowlitz River basin and flows through the original homelands of the Confederated Tribes and Bands of the Yakama Nation and the Cowlitz Indian Tribe. The river originates near Spirit Lake in the Mount St. Helens National Volcanic Monument, within Skamania County. From there, it flows westward for about 37 miles, passing through the Gifford Pinchot National Forest and privately-owned timberlands in Lewis

and Cowlitz counties. Eventually, it joins the North Fork Toutle River, which drains to the Cowlitz River.

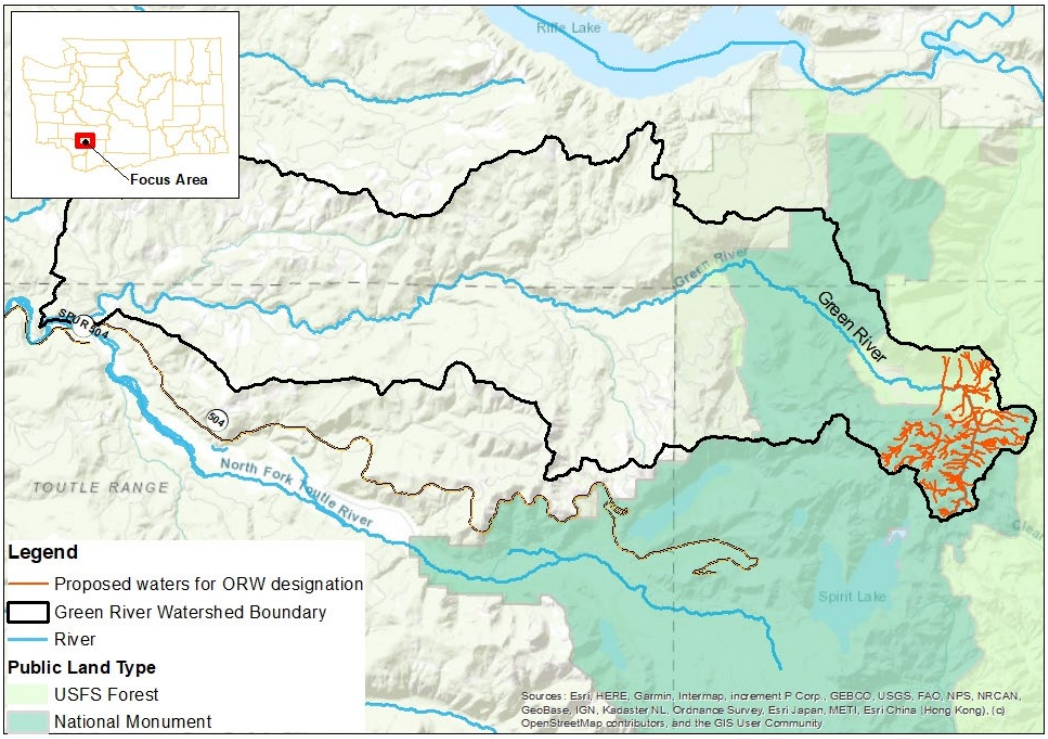

Figure 2. Green River watershed and proposed outstanding resource water designation.

The Green River meets the following eligibility criteria as an ORW in WAC 173-201A-330(1):

- The water is in a relatively pristine condition (largely absent human sources of degradation) or possesses exceptional water quality, and also occurs in federal and state parks, monuments, preserves, wildlife refuges, wilderness areas, marine sanctuaries, estuarine research reserves, or wild and scenic rivers.
- The water has both high water quality and regionally unique recreational value.
- The water is of exceptional statewide ecological significance.

- **Napeequa River and tributaries (Chelan County):** The Napeequa River runs for 16 miles from Butterfly Glacier in the Glacier Peak Wilderness, joining the White River that eventually flows into Lake Wenatchee. The river flows through a narrow, steep valley within the Cascade Range, with the White Mountains to the west and the Chiwawa Range to the east. The river was named after a Salishan word that means “white water place,” possibly because of its silt-laden appearance resulting from glacial melt.

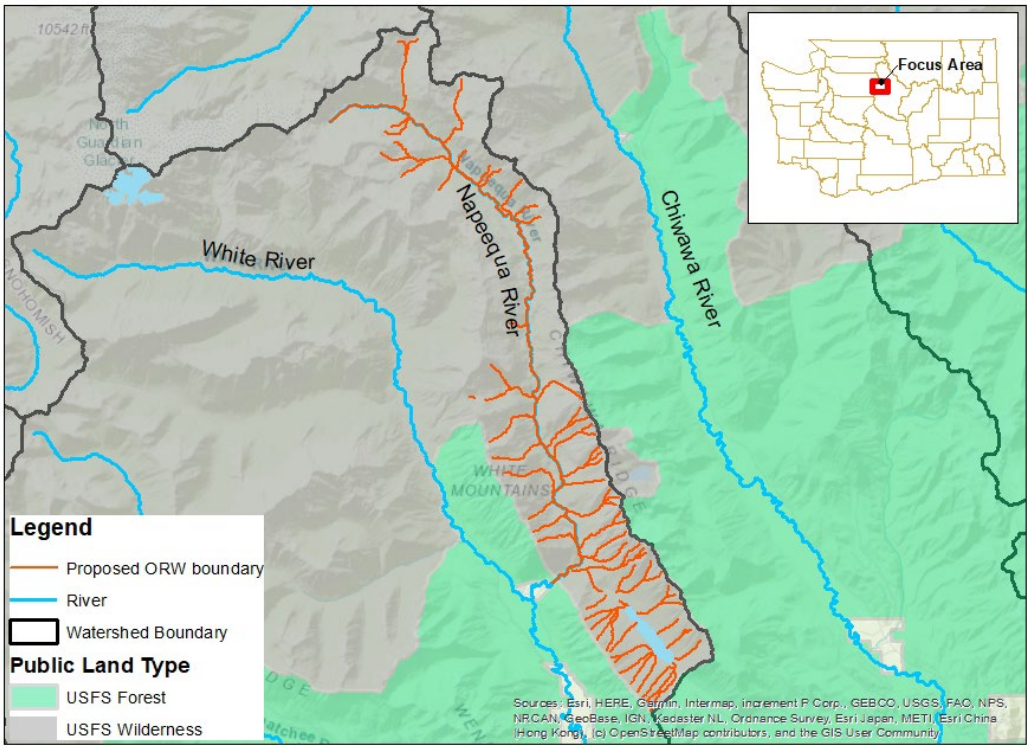

Figure 3. Proposed waters of the Napeequa River watershed for outstanding resource water designation.

The Napeequa River meets the following eligibility criteria as an ORW in WAC 173-201A-330(1):

- The water is in a relatively pristine condition (largely absent human sources of degradation) or possesses exceptional water quality, and also occurs in federal and state parks, monuments, preserves, wildlife refuges, wilderness areas, marine sanctuaries, estuarine research reserves, or wild and scenic rivers.
- The water has both high water quality and regionally unique recreational value.
- The water is of exceptional statewide ecological significance.

The proposed rule amendments would designate the following waterbody as a Tier III(B) ORW**:**

- **Soap Lake (Grant County):** Soap Lake, in Grant County and Water Resources Inventory Area (WRIA) 42 – Grand Coulee Watershed, is located within the traditional territory of the Moses-Columbia Tribe on land that was not legally ceded through treaty by the Confederated Tribes of the Colville Reservation.[7] The city of Soap Lake, with a population of nearly 1,700, is located at the southern end of the lake. The shoreline beyond the city limits remains mostly undeveloped, with steep bedrock outcroppings on

[7] Confederated Tribes of the Colville Reservation, 2021. https://static1.squarespace.com/static/572d09c54c2f85ddda868946/t/60418e325d59c90d8abe0358/1614908979097/Resolution+Index+03-04-2021.pdf

the east and west banks. The lake is known for its healing properties and was originally call Smokiam.

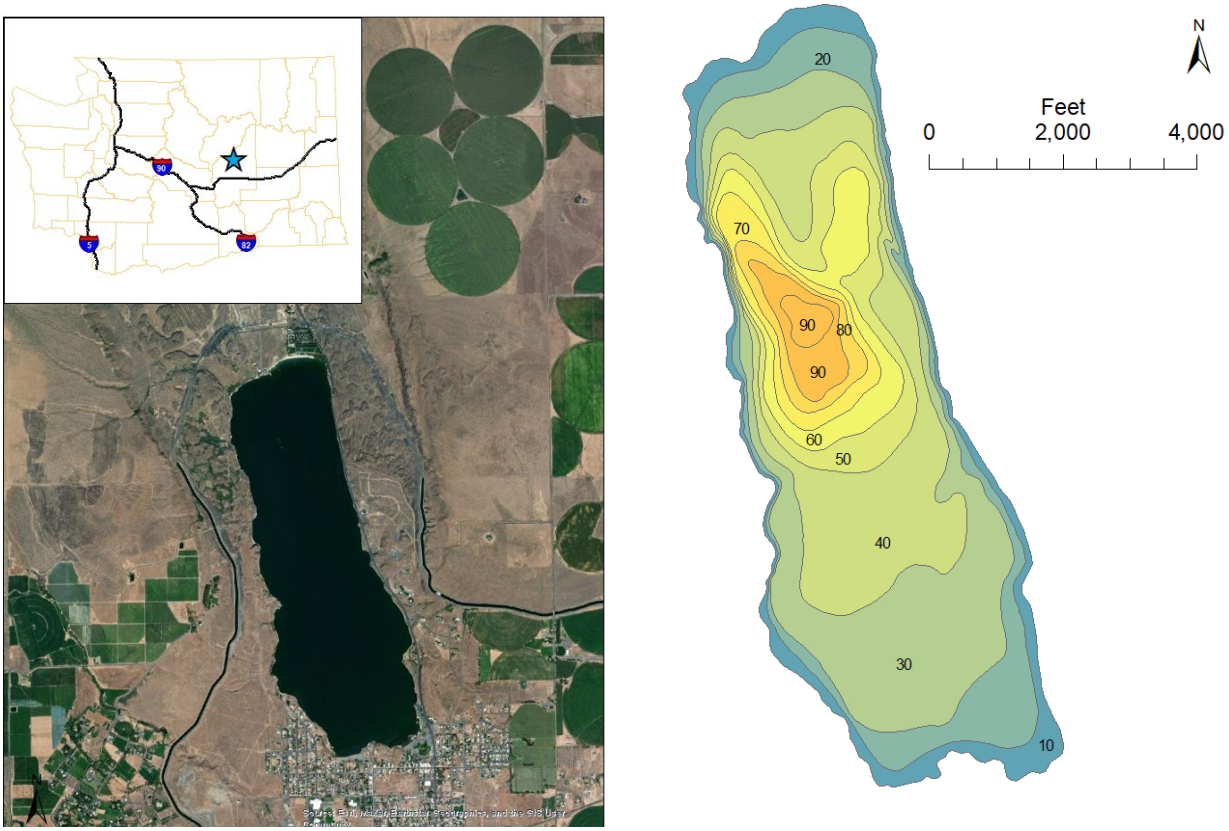

Figure 4. Aerial image (left) and depth profile (right) of Soap Lake.

Soap Lake meets the following eligibility criteria as an ORW in WAC 173-201A-330(1):

- The water has unique aquatic habitat types (for example, peat bogs) that by conventional water quality parameters (such as dissolved oxygen, temperature, or sediment) are not considered high quality, but that are unique and regionally rare examples of their kind.
- The water is of exceptional statewide ecological significance.
- The water has both high water quality and regionally unique recreational value.

1.2 Summary of the proposed rule amendments

The proposed rule amendments would make the following changes:

- Adding the definition of "Outstanding resource waters."
  - "Outstanding resource waters" are high quality waters designated by the state due to their exceptional water quality, ecological or recreational significance, unique habitat, or cold-water refuge. Outstanding resource waters are given the highest level of protection under the state Antidegradation policy.

- Designating four waterbodies as outstanding resource waters.
    - Tier III(A) outstanding resource waters:
        - Cascade River and tributaries within the designation boundary (Upstream from the west boundary of Mount Baker Snoqualmie National Forest).
        - Green River and tributaries within the designation boundary (Upstream from the boundary of the Gifford Pinchot National Forest).[8]
        - Napeequa River and tributaries within the designation boundary (Upstream from the boundary of the Okanogan-Wenatchee National Forest and private land near river mile 1).
    - Tier III(B) outstanding resource waters:
        - Soap Lake
- Expanding tribal consultation to align with current practice, to support proposed ORW designations and statewide interest in ORW protections.
    - In WAC 173-201A-330, the proposed amendments would delete "recognized" and "in the geographic vicinity of the water" from the sentence "The review will include a public process and consultation with recognized tribes in the geographic vicinity of the water" to reflect a more accurate description of Ecology's consultation policy. Ecology does not limit our invitation for consultation to recognized tribes, nor just to those in the vicinity of the water.
- Creating a new section listing waterbodies designated as ORWs.
    - Adding WAC 173-201A-332 Table 332- Outstanding Resource Water designations by water resource inventory area (WRIA). Table 332 lists waterbodies designated as Tier III(A) or Tier III(B) outstanding resource waters.
    - Adding notes for the Soap Lake ORW designation in the table:
        - Soap Lake measurable change is defined as a decrease in salinity as measured by conductivity of 639 microsiemens per centimeter (µS/cm) or greater.
        - In addition, human actions must not cause lake conductivity to decrease below 19,843 µS/cm as calculated as an annual average more than once in 10 years.
        - Annual average conductivity is calculated as the arithmetic average of seven or more samples collected April through October. Sampling should be distributed throughout this period.
- Making two minor changes in Table 602 to note the proposed ORW designations.

[8] Upstream from the west section line of Section 17, Township 10 North, Range 06 East.

- WAC 173-201A-602: Added a note to Cascade River and Boulder Creek as reference that this waterbody or portions thereof has an ORW designation in Table 602: WRIA 4 - Upper Skagit.
- WAC 173-201A-602: Added a note to Green River as reference that this waterbody or portions thereof has an ORW designation in Table 602: WRIA 26 – Cowlitz.

1.3 Reasons for the proposed rule amendments

Ecology received nominations to designate four water bodies as ORWs. Ecology collected information from local tribes and stakeholders, the U.S. Forest Service, and the National Parks Service about priorities and implementation strategies for managing and protecting the high-water quality and values for each nominated waterbody.

Ecology also met with local officials, including the Soap Lake City Council, the Skagit County Commissioners, the Skamania County Commissioners, Grant County Commissioners, and the Chelan County Natural Resources Director, to discuss implementation questions and concerns for this rulemaking. Based on the nominations, waterbody attributes, and stakeholder and local government outreach, Ecology decided to proceed with the proposed rule amendments to designate these waterbodies as ORWs.

1.4 Document organization

The remainder of this document is organized in the following chapters:

- **Baseline and the proposed rule amendments (Chapter 2):** Description and comparison of the baseline (what would occur in the absence of the proposed rule amendments) and the proposed rule requirements.
- **Likely costs of the proposed rule amendments (Chapter 3):** Analysis of the types and sizes of costs we expect impacted entities to incur as a result of the proposed rule amendments.
- **Likely benefits of the proposed rule amendments (Chapter 4):** Analysis of the types and sizes of benefits we expect to result from the proposed rule amendments.
- **Cost-benefit comparison and conclusions (Chapter 5):** Discussion of the complete implications of the CBA.
- **Least-Burdensome Alternative Analysis (Chapter 6):** Analysis of considered alternatives to the contents of the proposed rule amendments.
- **Regulatory Fairness Act Compliance (Chapter 7):** When applicable. Comparison of compliance costs for small and large businesses; mitigation; impact on jobs.
- **APA Determinations (Appendix A):** RCW 34.05.328 determinations not discussed in chapters 5 and 6.

Chapter 2: Baseline and Proposed Rule Amendments

2.1 Introduction

We analyzed the impacts of the proposed rule amendments relative to the existing rule, within the context of all existing requirements (federal and state laws and rules). This context for comparison is called the baseline and reflects the most likely regulatory circumstances that entities would face if Ecology does not adopt the proposed rule.

2.2 Baseline

The baseline for our analyses generally consists of existing rules and laws, and their requirements. This is what allows us to make a consistent comparison between the state of the world with and without the proposed rule amendments.

For this rulemaking, the baseline includes:

- The authorizing law: Chapter 90.48 RCW, Water Pollution Control.
- The existing rule: Chapter 173-201A WAC, Water Quality Standards for Surface Waters of the State of Washington.
- Washington Department of Natural Resources (WDNR) law governing management of state-owned aquatic lands: Chapter 79.105 RCW, Aquatic Lands – General.
- Federal Clean water Act (CWA): 33 U.S.C. §§1251-1387, Federal Water Pollution Control Act.
- 40 CFR 131.20, Water Quality Standards – State review and Revision of water quality standards.
- 40 CFR 131.12, Antidegradation policy and implementation methods.
- US Bureau of Reclamation and Quincy-Columbia Basin Irrigation District requirements related to:
    - The Columbia Basin Project.
    - The Soap Lake Protective Works.
- City of Soap Lake land use ordinances, Shoreline Master Program (SMP), and Comprehensive Plan.
- Grant County land use ordinances and SMP.
- US Forest Service and US National Parks Service laws and designations, including but not limited to:
    - Mt. Baker Snoqualmie National Forest designation as Late Successional Reserve, which is land “reserved for the protection and restoration of late successional

and old growth forest ecosystems and habitat for associated species" including for northern spotted owl.

- Glacier Peak Wilderness Area.
- Okanogan-Wenatchee National Forest.
- Mount St. Helens National Volcanic Monument.
- Gifford Pinchot National Forest.
- Northwest Forest Plan designation of land outside the National Monument as "matrix" where timber harvest and silvicultural activities are expected to occur.[9]
- Land purchases made with Land and Water Conservation funds, appropriated for conservation of recreation.
- Northwest Forest Plan designation as a riparian reserve, to maintain aquatic ecosystem functions and water quality.[10]

- Inventoried Roadless Areas under the federal Roadless Area Conservation Final Rule (2001), which restrict road construction and reconstruction and timber harvest.[11]
- Wild and Scenic River designation or eligibility under the National Wild and Scenic Rivers System.[12]
- Northwest Power and Conservation Council protection from hydroelectric development.[13]
- Shorelines of Statewide Significance.

Various laws and rules also govern management of wastes from human activities, and may include (as directly applicable or through local health department or municipal ordinances):

- WA Department of Health (DOH) requirements for management of on-site septic and wastewater, including vault toilets: Chapter 246-272A WAC.
- County on-site septic system management plans.

2.3 Proposed rule amendments

The proposed rule amendments would make the following changes:

- Adding the definition of "Outstanding resource waters."
  - "Outstanding resource waters" are high quality waters designated by the state due to their exceptional water quality, ecological or recreational significance,

[9] https://www.fs.usda.gov/r6/reo/landuse/
[10] Ibid.
[11] https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fsbdev3_000250.pdf
[12] https://rivers.gov/wsr-act.php
[13] https://www.streamnet.org/home/data-maps/protectedareas/pa-documents/

unique habitat, or cold-water refuge. Outstanding resource waters are given the highest level of protection under the state Antidegradation policy.

- Designating four waterbodies as outstanding resource waters.
    - Tier III(A) outstanding resource waters:
        - Cascade River and tributaries within the designation boundary (Upstream from the west boundary of Mount Baker Snoqualmie National Forest).
        - Green River and tributaries within the designation boundary (Upstream from the boundary of the Gifford Pinchot National Forest).
        - Napeequa River and tributaries within the designation boundary (Upstream from the boundary of the Okanogan-Wenatchee National Forest and private land near river mile 1).
    - Tier III(B) outstanding resource waters:
        - Soap Lake.
- Expanding tribal consultation to align with current practice, to support proposed ORW designations and statewide interest in ORW protections.
    - In WAC 173-201A-330, the proposed amendments would delete "recognized" and "in the geographic vicinity of the water" from the sentence "The review will include a public process and consultation with recognized tribes in the geographic vicinity of the water" to reflect a more accurate description of Ecology's consultation policy. Ecology does not limit our invitation for consultation to recognized tribes, nor just to those in the vicinity of the water.
- Creating a new section listing waterbodies designated as ORWs.
    - Adding WAC 173-201A-332 Table 332- Outstanding Resource Water designations by water resource inventory area (WRIA). Table 332 lists waterbodies designated as Tier III(A) or Tier III(B) outstanding resource waters.
    - Adding notes for the Soap Lake ORW designation in the table:
        - Soap Lake measurable change is defined as a decrease in salinity as measured by conductivity of 639 microsiemens per centimeter (µS/cm) or greater.
        - In addition, human actions must not cause lake conductivity to decrease below 19,843 µS/cm as calculated as an annual average more than once in 10 years.
        - Annual average conductivity is calculated as the arithmetic average of seven or more samples collected April through October. Sampling should be distributed throughout this period.
- Making two minor changes in Table 602 to note the proposed ORW designations.
    - WAC 173-201A-602: Added a note to Cascade River and Boulder Creek as reference that this waterbody or portions thereof has an ORW designation in Table 602: WRIA 4 - Upper Skagit.

- WAC 173-201A-602: Added a note to Green River as reference that this waterbody or portions thereof has an ORW designation in Table 602: WRIA 26 – Cowlitz.

2.3.1 Adding the definition of "Outstanding resource waters"

Baseline

Currently, there is no definition of "Outstanding resource waters" in the baseline rule. There are, however, existing criteria and protections that would apply to waterbodies designated as ORWs.

Proposed

The proposed amendment would define "Outstanding resource waters" as high-quality waters designated by the state due to their exceptional water quality, ecological or recreational significance, unique habitat, or cold-water refuge. Outstanding resource waters are given the highest level of protection under the state Antidegradation policy.

Expected impact

We do not expect this proposed amendment to result in costs as compared to the baseline. The intent of this definition is to introduce a new term to provide clarity about what an ORW is when the term is used in other sections with proposed amendments. Definitions in and of themselves do not result in costs or benefits outside of where the terms are used in the rule. Where any such impacts exist, they are an underlying part of the analysis of each respective rule amendment; please see below.

2.3.2 Designate four waterbodies as outstanding resource waters.

Baseline

Currently, Ecology has not designated any waterbody in the state as an ORW. There are multiple baseline rules that apply to the various land and water use activities in the proposed ORW boundaries:

- Soap Lake:
    - Washington Department of Natural Resources (DNR) law governing management of state-owned aquatic lands: Chapter 79.105 RCW, Aquatic Lands – General.
    - US Bureau of Reclamation and Quincy-Columbia Basin Irrigation District requirements related to:[14]
        - The Columbia Basin Project.

[14] Transfer of operations and maintenance document from Bureau of Reclamation to QCBID (1976).

        - The Soap Lake Protective Works.
    - City of Soap Lake land use ordinances, Shoreline Master Program (SMP), and Comprehensive Plan.
    - Grant County land use ordinances and SMP.
- Cascade River:[15]
    - US Forest Service and US National Parks Service laws and designations, including but not limited to:
        - Mt. Baker Snoqualmie National Forest designation as Late Successional Reserve, which is land "reserved for the protection and restoration of late successional and old growth forest ecosystems and habitat for associated species" including northern spotted owl.
        - Glacier Peak Wilderness Area.
        - North Cascades National Park.
    - Washington Department of Natural Resources (DNR) law governing management of state-owned aquatic lands: Chapter 79.105 RCW, Aquatic Lands – General.
    - Inventoried Roadless Areas under the federal Roadless Area Conservation Final Rule (2001), which restrict road construction and reconstruction and timber harvest.[16]
    - Wild and Scenic River designation under the National Wild and Scenic Rivers System.[17]
    - Northwest Power and Conservation Council protection from hydroelectric development.[18]
- Napeequa River:
    - US Forest Service rules and designations, including but not limited to designation of the Glacier Peak Wilderness Area and Okanogan-Wenatchee National Forest.

[15] We note that approximately one-third of total stream length in the proposed ORW designation area is in a National Forest (rather than National Park or Wilderness Area), and much of the surrounding land is managed as a Late Successional Reserve. While these Late Successional Reserve areas have historic timber harvest properties, Ecology communication with the US Forest Service indicates that these lands are not actively being managed with intent to harvest. Short term activities such as road or culvert maintenance would not be affected by the proposed ORW designation. We note also that tributaries of the mainstem Cascade River are not entirely within the protected areas but contribute to the protection of downstream water quality in the Cascade River.

[16] https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fsbdev3_000250.pdf

[17] https://rivers.gov/wsr-act.php

[18] https://www.streamnet.org/home/data-maps/protectedareas/pa-documents/

- Washington Department of Natural Resources (WDNR) law governing management of state-owned aquatic lands: Chapter 79.105 RCW, Aquatic Lands – General.
- Eligibility for Wild and Scenic River designation under the National Wild and Scenic Rivers System.[19]
- Northwest Power and Conservation Council protection from hydroelectric development.[20]

- Green River:
  - US Forest Service rules and designations, including but not limited to the:
    - Mount St. Helens National Volcanic Monument.
    - Gifford Pinchot National Forest.
    - Northwest Forest Plan designation of land outside the National Monument as "matrix" where timber harvest and silvicultural activities are expected to occur.[21]
    - Land purchases made with Land and Water Conservation funds, appropriated for conservation of recreation.
    - Northwest Forest Plan designation as a riparian reserve, to maintain aquatic ecosystem functions and water quality.[22]
  - Washington Department of Natural Resources (WDNR) law governing management of state-owned aquatic lands: Chapter 79.105 RCW, Aquatic Lands – General.
  - Inventoried Roadless Areas under the federal Roadless Area Conservation Final Rule (2001), which restrict road construction and reconstruction and timber harvest.[23]
  - Eligibility for Wild and Scenic River designation under the National Wild and Scenic Rivers System.[24]
  - Designation as a shoreline of statewide significance, beginning at the Gifford Pinchot National Forest boundary downstream to Cowlitz-Skamania County line.
  - Northwest Power and Conservation Council protection from hydroelectric development.[25]

[19] https://rivers.gov/wsr-act.php
[20] https://www.streamnet.org/home/data-maps/protectedareas/pa-documents/
[21] https://www.fs.usda.gov/r6/reo/landuse/
[22] Ibid.
[23] https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fsbdev3_000250.pdf
[24] https://rivers.gov/wsr-act.php
[25] https://www.streamnet.org/home/data-maps/protectedareas/pa-documents/

Various laws and rules also govern management of wastes from human activities that may potentially discharge to waters, and may include (as directly applicable or through local health department or municipal ordinances):

- WA Department of Health (DOH) requirements for management of on-site septic and wastewater, including vault toilets: Chapter 246-272A WAC.
- County on-site septic system management plans.

Proposed

The proposed rule amendments would designate four waterbodies as outstanding resource waters, including:

- Tier III(A) outstanding resource waters:
    - Cascade River and tributaries within the designation boundary (Upstream from the west boundary of Mount Baker Snoqualmie National Forest).
    - Green River and tributaries within the designation boundary (Upstream from the boundary of the Gifford Pinchot National Forest).[26]
    - Napeequa River and tributaries within the designation boundary (Upstream from the boundary of the Okanogan-Wenatchee National Forest and private land near river mile 1).
- Tier III(B) outstanding resource waters:
    - Soap Lake.

Expected impact

The proposed rule amendments would likely result in both costs and benefits compared to baseline, though the scope of these impacts is uncertain, as they depend on unexpected future potential land or water activities from which the proposed ORWs are not sufficiently protected under the baseline. Costs could include expenditures on additional sampling or compliance requirements for some future leases, claims, or rights, or the expansion of existing claims, to the extent they would not be required under the baseline.

Benefits would include corresponding incremental protection over the baseline of:

- Values of exceptional water attributes, including relatively pristine and regionally unique waters and water quality of withdrawals.
- Recreational values.
- Fish and wildlife values, including endangered or threatened species and unique organisms.

[26] Upstream from the west section line of Section 17, Township 10 North, Range 06 East.

- Cultural and use values to tribes.
- Educational and scientific values.
- State-specific regulatory protection of ORWs.

2.3.3 Expanding tribal consultation to align with current practice, to support proposed ORW designations and statewide interest in ORW protections.

Baseline

Under the baseline Ecology will consult with recognized tribes in the geographic vicinity of the water. As standard practice, however, Ecology consults with all tribes in the state.

Chapter 70A.02 RCW, Environmental Justice also requires Environmental Justice Assessments for significant agency actions, including but not limited to:

- Identification of whether a proposed action is expected to have any local or regional impacts to federally reserved tribal rights and resources, including but not limited to those protected by treaty, executive order, or federal law.
- Summary of community input and description of how the agency can further involve overburdened communities, vulnerable populations, affected tribes, and Indigenous populations in development of the action.
- Consultation with tribes if an action affects federal recognized tribal rights and interest in their tribal lands, including federally defined "Indian country"[27], sacred sites, traditional cultural properties, burial grounds, and other tribal sites protected by federal or state law. These requirements are currently being developed as part of the tribal consultation framework.

Proposed

The proposed rule amendments would expand tribal consultation to include all tribes, instead of just those that are federally recognized or located in the immediate geographic area of an action.

Expected impact

The proposed rule amendments would result in additional costs to Ecology in the form of employees' salary and transportation and other expenses related to tribal consultation. No other parties would incur costs because of the proposed rule amendments. There would not be costs imposed on parties outside of Ecology. These amendments would also generate benefits of broader inclusion of tribal interests in regulatory decisions.

[27] 18 U.S.C. Sec. 1151.

We note that it is also Ecology's current practice to consult tribes regardless of their location, and that baseline requirements under Chapter 70A.02 RCW require consultation based on not only geography, but on interests and impacts, which could extend beyond the geography of an agency action.

2.3.4 Creating a new section listing waterbodies designated as ORWs

Baseline

The baseline rule has no existing table providing information on waterbodies designated as ORWs.

Proposed

The proposed rule amendments would add the table and notes below to provide clarity and context in the proposed ORW designation.

Table 1. Proposed summary table of ORW designations by WRIA.

WRIA	County	Waterbody name	Designation boundary	Tier III(A) or III(B)
4 – Upper Skagit	**Skagit**	**Cascade River and tributaries within the designation boundary.**	**Upstream from the west boundary of Mount Baker Snoqualmie National Forest (latitude 48.5324, longitude -121.3078) at the west section line of Section 07, Township 35 North, Range 12 East, to headwaters, including tributaries**	**Tier III(A)**
26 – Cowlitz	**Skamania**	**Green River and tributaries within the designation boundary.**	**Upstream from the boundary of the Gifford Pinchot National Forest (latitude 46.3484, longitude -122.0938) at the west section line of Section 17, Township 10 North, Range 06 East, to headwaters, including tributaries**	**Tier III(A)**
42 – Grand Coulee	**Grant**	**Soap Lake**	**Latitude 47.4068, longitude -119.4969**	**Tier III(B)[1]**
45 – Wenatchee	**Chelan**	**Napeequa River and tributaries within the designation boundary.**	**Upstream from the boundary of the Okanogan-Wenatchee National Forest and private land near river mile 1 (latitude 47.9269, longitude -120.8870) within Section 17, Township 28 North, Range 16 East, to headwaters, including tributaries**	**Tier III(A)**

1. Notes for Soap Lake:
    a. Soap Lake measurable change is defined as a decrease in salinity as measured by conductivity of 639 microsiemens per centimeter (µS/cm) or greater.
    b. In addition, human actions must not cause lake conductivity to decrease below 19,843 µS/cm as calculated as an annual average more than once in 10 years.
    c. Annual average conductivity is calculated as the arithmetic average of seven or more samples collected April through October. Sampling should be distributed throughout this period.

Expected impact

We do not expect the table in this proposed amendment to result in costs or benefits not already addressed in the previous section discussing designation of the four waterbodies as ORWs. There could be a benefit to some readers from providing clarity in the locations and designations of the proposed ORWs.

The proposed notes for Soap Lake define measurable change for conductivity based on the US Geological Survey (USGS) analysis of uncertainty for specific conductance measurements.[28] As compared to the baseline, which has no defined measurable change in salinity due to any cause, this proposed rule amendment could result in costs associated with future development needing to perform modeling if it potentially affects the lake's salinity. These costs are discussed as part of overall costs and benefits, in Section 2.3.2, above.

2.3.5 The rule amendment would also make two minor changes in Table 602.

Baseline

Table 602 in the baseline rule lists designated uses of fresh waters by water resource inventory area (WRIA).

- Currently, there are no designated uses listed related to Soap Lake or the Napeequa River.
- There are designated uses listed for "Cascade River and Boulder Creek" and "Green River."

Proposed

The proposed rule would add notes to the Table 602 designated use listings for "Cascade River and Boulder Creek" and "Green River" to indicate that portions of the waterbodies are designated as ORWs.

Expected impact

The proposed rule amendments would not result in costs, as they are cross-references to proposed amendments designating waterbodies as ORWs. Inclusion of the proposed notes in Table 602 would provide a benefit of clarity for those reading the table, giving them full information on the listed waterbodies.

[28] U.S. Geological Survey (2019) Specific conductance: U.S. Geological Survey Techniques and Methods, book 9, chap. A6.3, 15 p., https://doi.org/10.3133/tm9A6.3. [Supersedes USGS Techniques of Water-Resources Investigations, book 9, chap. A6.3, version 1.2.

Chapter 3: Likely Costs of the Proposed Rule Amendments

3.1 Introduction

We analyzed the likely costs associated with the proposed rule amendments, as compared to the baseline. The proposed rule amendments and the baseline are discussed in detail in Chapter 2 of this document.

3.2 Cost analysis

The proposed rule amendments would make the following changes:

- Adding the definition of "Outstanding resource waters."
- Designating four waterbodies as outstanding resource waters.
- Expanding tribal consultation to align with current practice, to support proposed ORW designations and statewide interest in ORW protections.
- Creating a new section listing waterbodies designated as ORWs.
- Making two minor changes in Table 602 to note the proposed ORW designations.

3.2.1 Adding the definition of "Outstanding resource waters"

We do not expect this amendment to result in costs as compared to the baseline. See Chapter 2 for discussion.

3.2.2 Designate four waterbodies as outstanding resource waters

Cascade, Napeequa, and Green rivers

The proposed rule amendments designating the Cascade River, Napeequa River and Green River as Tier III(A) ORWs could result in future costs under very specific circumstances. While we do not expect current activities in the rivers and surrounding land to be required to change any behaviors or incur any costs, any potentially successful future leases, claims, or rights could be affected by the proposed amendments, to the extent the amendments set more stringent requirements than baseline state water quality standards.

The following are current activities identified on or adjacent to each proposed ORW-designated area:[29]

- Cascade River:
    - No active instream mining claims.

[29] WA Department of Ecology, 2023. Proposed Outstanding Resource Waters Designations for Soap Lake and Portions of the Cascade, Napeequa, and Green Rivers. Technical Support Document. July 2023.

    - 1 private inholding: special use permit; designated by the Skagit County Assessor as "designated/classified forest" under WAC 458-53-030.[30]
    - 1 surface water right: Short form claim (unverified documentation of rights established before permits were required) for non-consumptive domestic and mining purposes from the North Fork of the Cascade River within the North Cascades National Park.[31]
    - 2 federal campgrounds.
    - 7 hiking trails.
- Napeequa River:
    - No active instream mining claims.
    - No inholdings or permits.
    - No surface water rights.
    - Accessibility only by trail.
- Green River:
    - No active instream mining claims.
    - No inholdings or permits.
    - No surface water rights.
    - Trails including horseback riding trails.

Baseline regulations and the nature of ORW designation within existing land protections would mean the current exceptional qualities of the water could be "frozen in time" without affecting existing water and land activities.

- For the Napeequa and Green rivers, there are no such regulated activities, and other activities (such as recreation) have not been identified as affecting water quality in these rivers.
- Existing activities on the Cascade River are similarly not known to impact water quality, and in the case of private inholdings and water rights, are covered by baseline water quality regulations and regulations affecting private forestlands.

We do not, therefore, expect the proposed amendments to impact current users of these rivers or surrounding lands.

If future claims, inholdings, or permits for other regulated activities are approved, they could potentially be impacted by the proposed rule amendments. In most cases, however, we do not expect such impacts to occur based on baseline protections and use trends:

[30] https://skagitcounty.net/Search/Property/?id=P46326
[31] https://appswr.ecology.wa.gov/docs/waterRights/A446/A4460995.pdf

- While mining was active in the area until just before the eruption of Mount St. Helens, the most recent permit for exploratory drilling (a 2018 US Forest Service and Bureau of Land Management permit) was vacated by the courts.[32] Other exploration or claims have not been attempted since then.
- Expansion of current private land use (under special use permit) and water right use would be regulated by various baseline regulations as applicable to the nature of the expansion. The indoor and outdoor domestic uses of the identified water right, even if expanded, are not likely to impact water quality given their scope. Expanded or more intensive use of designated timberland would be regulated by baseline regulations intended to prevent upland and shoreline impacts to water quality.
- The protected nature inherent to lands surrounding ORWs under the terms of the baseline rule make it unlikely that significant additional development or water rights would be issued in the future.
- While existing recreational activities have not been identified as impacting water quality in the rivers, expansion of these activities to a degree that would impact water quality could result in a need for additional resources or infrastructure for recreational users. These additional resources, however, would be required under baseline regulations for public lands and handling of waste.

The proposed rule amendments would, however, provide additional protection in excess of the baseline in cases we do not expect as discussed above.

Example potential small-scale development

It is unlikely the proposed rule amendments would limit a small scale claim, right, development, permit, or expansion but an illustrative example could be a mining claim that could have impacts to ORW-designated waters. These impacts could include surface water runoff, which would be addressed by baseline water quality standards and permitting requirements, as well as requirements for development of infrastructure such as roads. Any additional impacts (e.g., runoff of substances not covered by existing water quality standards) would be addressed by the proposed ORW designation, but actions taken to address baseline requirements (e.g., runoff capture, berms, or other runoff-management best practices required under permit) could also address these needs.

Example potential large-scale development

For unexpected large-scale development under multiple permits (e.g., if protected lands are sold or leased in larger quantities than they currently are) that could have a cumulative effect on water quality, the proposed rule amendments could result in more stringent permit requirements distributed across permittees so they do not collectively impact water quality. We

[32] *Cascade Forest Conservancy v. Heppler*, 2022. No. 3:19-cv-00424-HZ (D. Or. Feb. 15, 2021). Final decision issued January 31,2022.

do not expect this to be the case, but the proposed rule amendments protect the proposed ORWs from this type of unexpected situation.

Additional sources of uncertainty

There is also uncertainty in what water quality standards and other rules may be in the future. We could not confidently forecast which water quality standards would become more or less stringent in the future, whether water quality standard changes would be approved by the EPA, or how the relevant federal regulations would be interpreted in the future. By ensuring the current exceptional qualities of these rivers are protected regardless of future standards, the proposed rule amendments mitigate this risk. See discussion of Washington State protection of ORWs, in Chapter 4, below.

Soap Lake

The proposed rule amendments designating Soap Lake as a Tier III(B) ORW could result in future costs under similarly specific circumstances, though the circumstances under which these costs could occur differs from those of the three ORW-designated rivers above – the Tier III(B) designation addresses measurable change in salinity of the lake and the unique condition of the water. Similarly, to the three ORW-designated rivers, we do not expect current activities on the lake and surrounding land to be required to change any behaviors or incur any costs.

The following are current activities identified in and around Soap Lake:[33,34]

- Three private RV resorts.
- One lodge.
- Two public beaches.
- Private residences.
- Mineral water withdrawals of one cumulative cubic foot per second (cfs) for:
    - One residential property.
    - One multifamily property.
    - One commercial spa.
    - Two hotels.

Baseline rules and the nature of ORW designation within protections would mean that the current exceptional qualities of the water could be "frozen in time" without affecting existing water and land activities. Existing activities at Soap Lake, including of private inholdings and water rights, are covered by baseline water quality and shoreline regulations. We do not,

[33] WA Department of Ecology, 2023. Proposed Outstanding Resource Waters Designations for Soap Lake and Portions of the Cascade, Napeequa, and Green Rivers. Technical Support Document. July 2023.
[34] We note that there have also been annual hydroplane races on Soap Lake, but as of this writing the 5-year right of entry authorization has expired without renewal.

therefore, expect the proposed amendments to impact current users of this lake or surrounding lands.

Potentially successful future development or rights could be affected by the proposed amendments if sufficient protection of the proposed ORWs is not achieved under the baseline. Given the proposed specification of measurable change in salinity and anthropogenic change in salinity, this could include additional sampling or modeling as part of a permitting process, if a proposed action is likely to affect inflow or water removal from the lake in a way that would affect salinity.

The proposed rule amendments would, however, provide additional protection in excess of the baseline in cases we do not expect as discussed above.

Example potential development

While it is unlikely a permitted development or expansion would occur and be in some way additionally limited by the proposed rule amendments, given the current land and water activities above and the unbuildable nature of the east and west shorelines, an illustrative example could be a development with large discharge to, or withdrawals from, Soap Lake.

- Significant withdrawals affecting salinity are unlikely, as groundwater wells support most existing development in the area, and these wells are typically too deep to affect the groundwater to surface water interactions of the lake. Groundwater levels are also managed and sustained by the Soap Lake Protective Works.
- Discharges to the lake during commercial or residential development construction or subsequent use (such as stormwater runoff) would be covered by baseline surface water quality standards and implementation requirements via permit to prevent impacts to the lake, as well as the baseline Shoreline Master Plans and Comprehensive Plan.
- An upland agricultural development with irrigation could affect the quantity of water moving toward the lake. However, this water is likely to infiltrate into the ground before reaching the lake. The Quincy-Columbia Irrigation District monitors and operate wells that intercept irrigation water, preventing it from entering Soap Lake.

Example potential impact and response

While we do not expect the likely types of development and circumstances discussed above to be impacted by the proposed rule amendments, there remains potential for the ORW attributes of the lake to change under the baseline. If this happened, due to human causes, naturally, or as a combination of the two, Ecology would investigate the cause of the change. These impacts would also be considered as part of ongoing management by the Soap Lake Protective Works

owned by the Bureau of Reclamation and operated by the Quincy-Columbia Basin Irrigation District under contract.[35]

In this situation, the proposed rule amendments, in combination with water quality protection actions available under the baseline rule, could result in restrictions such that dischargers to the lake, groundwater, or through interconnection do not freshen the lake beyond the proposed thresholds. This would result in internal costs to Ecology of conducting a study of the cause(s) of lake freshening. Once cause(s) are identified, Ecology would use implementation options available to us to address the issue, potentially including permit limits. We could not confidently predict the specifics and external costs of such a situation, as it would inherently be exceptional and unexpected, but they might include working with the city or freshening sources or providing technical assistance.

Additional sources of uncertainty

There is also uncertainty in what water quality standards and other rules may be in the future. We could not confidently forecast which water quality standards would become more or less stringent in the future, whether water quality standard changes would be approved by the EPA, or how the relevant federal regulations would be interpreted in the future. By ensuring the current exceptional qualities of these rivers are protected regardless of future standards, the proposed rule amendments mitigate this risk. See discussion of Washington State protection of ORWs, in Chapter 4, below.

3.2.3 Expanding tribal consultation to align with current practice, to support proposed ORW designations and statewide interest in ORW protections.

The proposed rule amendments would likely result in costs to Ecology in the form of employees' salary and transportation costs. When comparing with the baseline, these additional costs would not be included in the costs analysis according to Chapter 34.05 RCW: Administrative Procedure Act.

3.2.4 Creating a new section listing waterbodies designated as ORWs

We do not expect this amendment to result in costs as compared to the baseline. See Chapter 2 for discussion.

[35] United States Bureau of Reclamation. 1976. Transfer Report and Report of Joint Inspection in Connection with the Transfer of Operation and Maintenance Responsibilities of Bureau Constructed Works, Special Reserved Works (Quincy District) to the Quincy-Columbia Basin Irrigation District. August 30, 1976. Boise, Idaho.

3.2.5 The rule amendment would also make two minor changes in Table 602

We do not expect this amendment to result in costs as compared to the baseline. See Chapter 2 for discussion.

Chapter 4: Likely Benefits of the Proposed Rule Amendments

4.1 Introduction

We analyzed the likely benefits associated with the proposed rule amendments, as compared to the baseline. The proposed rule amendments and the baseline are discussed in detail in Chapter 2 of this document.

4.2 Benefits analysis

The proposed rule amendments would make the following changes:

- Adding the definition of "Outstanding resource waters."
- Designating four waterbodies as ORWs.
- Expanding tribal consultation to align with current practice, to support proposed ORW designations and statewide interest in ORW protections.
- Creating a new section listing waterbodies designated as ORWs.
- Making two minor changes in Table 602 to note the proposed ORW designations.

4.2.1 Adding the definition of "Outstanding resource waters"

The benefit of adding this definition is to introduce a new term to provide clarity about what an ORW is when the term is used in other sections with proposed amendments. Definitions in and of themselves do not result in costs or benefits outside of where the terms are used in the rule. Where any such impacts exist, they are an underlying part of the analysis of each respective rule amendment, below.

4.2.2 Designate four waterbodies as outstanding resource waters

The rule amendments would likely result in several benefits to the four designated waterbodies, to the extent that the amendments are ultimately more protective than the baseline from future impacts that would affect the outstanding qualities of the proposed ORWs.

Economic benefits may include: values of exceptional water attributes, including relatively pristine or unique waters and water quality of withdrawals; recreational values; fish and wildlife values; cultural and use values to tribes; educational and scientific values; and State-specific regulatory protection of ORWs (see table below).

Table 2. Benefits to Cascade River, Napeequa River, Green River and Soap Lake.

Benefit Category	Cascade River	Napeequa River	Green River	Soap Lake
Values of exceptional water attributes, including relatively pristine waters and water quality of withdrawals	**The headwaters of the Cascade River are undeveloped and free from human sources of degradation.**	**The proposed boundary of the Napeequa River outstanding resource water designation is entirely absent of human development**	**The upper Green River watershed has experienced little human disturbance and the majority of the proposed boundary is protected within the Mount St. Helens National Volcanic Monument.**	**Exceptionally high in levels of calcium, chloride, magnesium, sodium, and sulfate; unique lower layer of water that has been isolated from the rest of the lake for at least 2,000 years.**
Recreational Values	**Whitewater kayaking, hiking trails, and campgrounds**	**Hiking**	**Hiking, camping; mountain biking; horseback riding and Green River Horse Camp at Mount St. Helens National Volcanic Monument; Green river trail; and "Valley of the Giants".**	**A destination for those seeking to soak in the water to treat numerous conditions such as rheumatism, liver and kidney diseases, and skin conditions.**
Fish and Wildlife Values, including endangered or threatened species and unique organisms	**Threatened spring and summer chinook, fall chum, coho, sockeye, resident coastal cutthroat trout, bull trout, and odd-year pink salmon. Endangered species protected: state endangered northern spotted owl, state endangered lynx, state endangered grizzly bear, and wolverine**	**Sockeye, spring Chinook, Westslope cutthroat, rainbow trout, mountain whitefish, and bull trout. Other species protected: federally threatened northern spotted owl, wolverine (Endangered Species Act candidate for listing), mule deer, federally threatened lynx, and gray wolf**	**Fall Chinook, winter steelhead, cutthroat trout, summer steelhead, and North Fork Toutle River steelhead, and Wild steelhead gene bank by Washington Department of Fish and Wildlife. Other species protected: federally threatened northern spotted owl habitat)**	**Shorebirds and waterfowl, such as: eared grebes, ruddy ducks, red-necked phalarope, western sandpiper, and lesser yellowlegs. Home to bacteria that are particularly well-adapted to these extreme high saline, high sulfide environments.**

Benefit Category	Cascade River	Napeequa River	Green River	Soap Lake
Cultural and use values to tribes	**Maintenance and restoration of tribal lifeways and fisheries statewide. This includes local Upper Skagit and Sauk-Suiattle tribes.**	**Maintenance and restoration of tribal lifeways and fisheries statewide.**	**Maintenance and restoration of tribal lifeways and fisheries statewide. This includes local Confederated Tribes and Bands of the Yakama Nation and the Cowlitz Indian Tribe**	**Maintenance and restoration of tribal lifeways and fisheries statewide. This includes local Confederated Tribes and Moses-Columbia Tribe. Tribes gathered on the shores of the lake for ceremonies and used the waters to heal those suffering from ailments.**
Educational and scientific values	**e.g., Biodiversity and Ecological study**	**e.g., Biodiversity and Ecological study**	**Extremely unique opportunity for scientists studying the ecological processes of recovery from an eruption, and for the public to learn about and recreate in such a singular landscape**	**Soap Lake was designated as a Microbial Observatory by the National Science Foundation. At least four species of bacteria have been identified as endemic to the lake.**
State-specific regulatory protection of ORW	**Mitigating uncertain future changes in federal regulations**	**Mitigating uncertain future changes in federal regulations**	**Mitigating uncertain future changes in federal regulations**	**Mitigating risk of future point sources that may degrade outstanding lake attributes through permitted discharge.**

4.2.2.1 Values of exceptional water attributes, including relatively pristine waters and water quality of withdrawals

The proposed rule amendments would result in an enhanced water quality protection for the designated waterbodies. However, we were unable to quantify the degree to which the amendments will improve water quality compared to the baseline, as this would happen under future and likely unexpected development or use circumstances, in which the baseline is not sufficiently protective to maintain the qualities of the ORW.

While there is evidence that designated protection will benefit water quality, a quantitative relationship is unavailable. Because of this, we are not able to quantify the economic benefits of the rule amendments as they relate to water quality at this time. However, below is information that shows the potential economic value loss due to the decrease in water quality.

The literature has estimated the economic values of water quality. For instance, Papenfus (2019) conducted a study using data from Washington State to estimate the impact of water quality impairments on residential housing prices in Puget Sound. This research revealed that properties located adjacent to impaired (listed as persistently exceeding water quality standards) waterbodies experienced an annualized depreciation of $1,942 in 2011 dollars[36] compared to properties that were along unimpaired waterbodies.

A recent judge's order further underscores the economic values of improved water quality. Electron Hydro, LLC, located near Mount Rainier National Park in Washington state, has been instructed to pay a total of 1 million dollars as a result of a spill of synthetic field turf and its associated rubber particles into the Puyallup River, an important habitat for salmon rearing, in 2020.[37] This is also the most substantial financial penalty ever imposed in an environmental criminal case in Washington State's history.

We also note that the exceptional nature of the water quality in the proposed ORW waterbodies makes them differ from other waterbodies, potentially resulting in a higher value held for their unique qualities. The high mineral content, salinity, alkalinity, and layered waters of Soap Lake are extraordinary, to the extent that the water and mud are valued for their healing properties. The relatively pristine nature of the water in the proposed river ORWs contributes to a thriving ecosystem and supports all the related benefits discussed below.

4.2.2.2 Recreational values

We were unable to quantify the degree to which the amendments will attract more recreational visits to the outstanding resource waters compared to the baseline. However, we can offer insights into the value individuals place on recreational activities in freshwater settings. In a 2008 study focused on the rivers and lakes within the Puget Sound Basin, aesthetic

[36] Papenfus M. 2019. Do housing prices reflect water quality impairments? Evidence from the Puget Sound. Water Resource Economics. 27:1-10. Available online at: https://pubmed.ncbi.nlm.nih.gov/36419526/

[37] Electron Hydro dam owner ordered to pay largest financial penalty in an environmental criminal case in state history. Available online at: https://www.atg.wa.gov/news/news-releases/electron-hydro-dam-owner-ordered-pay-largest-financial-penalty-environmental

and recreation values were estimated to be $19,700 per acre per year in 2006 dollars.[38] This demonstrates the significant value people attach to these natural resources for recreational purposes. Similarly, a separate study conducted in 2020 examined the recreational values associated with fresh water in Florida. The research found that recreation in the St. Johns River Basin was valued at $212 per household per year.[39] This indicates the importance placed on engaging in recreational activities within such environments.

4.2.2.3 Fish and Wildlife Values, including endangered or threatened species and unique organisms

Fish values include use values and non-use values. The use value of fish includes value of commercial fish harvest (market priced) and value of recreational fish trips (market and nonmarket values). According to the report "State of salmon in watershed 2022",[40] domestic commercial fisheries create nearly 23,000 jobs in Washington, with salmon harvest alone worth almost $14 million a year. People fishing and harvesting shellfish recreationally in Washington spend an estimated $1.5 billion annually on equipment and trip-related costs, supporting many rural families and businesses.

Non-use values of fish may include existence value (the species existing in and of itself) and bequest value (the ability of future generations to have a species). Many of these values are difficult to quantify, particularly non-use values that are not reflected in expenditures such as spending on travel or recreational fishing.

Endangered or threatened species and unique organisms play vital roles in maintaining ecosystem balance and functioning. Their presence or absence can have great impacts on other species and the overall health of ecosystems. In terms of its economic values, according to a 2011 study, the total annual value of ecosystem services in the United States was estimated to be approximately $1.6 trillion. This study also revealed that the economic value of ecosystem services provided by National Wildlife Refuges was more than $32 billion each year.[41]

We note that the proposed ORWs include tributaries for which there is limited or lacking documentation of fish spawning. However, fish including endangered and threatened salmonids are present in larger tributaries and mainstem rivers. Upstream habitat provides additional spawning and rearing areas for these fish. Outstanding water quality in those

[38] Earth Economics 2008. A new view of the Puget Sound Economy. Available online at: https://www.sierraclub.org/sites/default/files/sce-authors/u591/AI-Puget-Sound-Economics.pdf
[39] Borisova et al., 2020. Economic value of Florida water resources: value of freshwater-based recreational experiences. Available online at: https://edis.ifas.ufl.edu/publication/FE1067
[40] State of salmon in watershed 2022. Report. https://stateofsalmon.wa.gov/salmon-101/.
[41] Southwick Associates. The economics associated with outdoor recreation, natural resource conservation and historic preservation in the United States. 2011. Available online at: https://www.waterboards.ca.gov/northcoast/water_issues/programs/agricultural_lands/pdf/121205/references/NFWF_EconomicValueofOutdoorRecreation.pdf

tributaries, unlike degraded waters, carries less risk of fish exposure to pollutants throughout their lifecycle. This contributes to improved spawning and survival rates.

Other wildlife species, such as birds, also have both use and non-use values. Birds have been valued for their consumptive uses such as feathers and protein, and they contribute to recreational experiences in nature. For example, a recent study found that individuals are willing-to-pay an average of $56.74 for bird watching in 2020 dollars.[42]

We were unable to quantify the degree to which the amendments will improve the population of fish and wildlife compared to the baseline. Thus, we were unable to confidently quantify improved fish and wildlife values resulted from the rule amendment.

We also considered the expenditures spent on nearby conservation efforts, including nearby conservation easements.[43] These are not necessarily specific to any particular type of value, and likely include various recreation values and value contributions from land habitat protection, instream species protection, and other values collectively held in the lands and waters. The Tall Timbers Ranch easement protects critical areas on the White River and Napeequa River at River Mile 11, and was funded by salmon recovery grants. The easement extinguished all development rights and limited land uses (similar to existing camp use on the property) of a total of three 20-acre easement areas (across two phases) that collectively include over 2,500 feet of riverbanks on the Napeequa, and its confluence with the White River as well as over 5,500 feet along the White River. Between 2009 and 2015, nearly $850,000 was allocated in grants supporting the Tall Timbers Ranch project.[44]

4.2.2.4 Cultural and use values to tribes

Tribal values for waters designated as ORWs include both use values and non-use values for the waters and areas themselves, as well as the environment and wildlife they support:

- Use values, include but are not limited to use of traditional locations, resources, and foods in maintenance and restoration of traditional lifeways. Use values also include tribal fisheries in usual and accustomed areas, for sale, or for consumption including ceremonial and subsistence.
- Non-use values, such as spiritual value (intrinsic worth and significance that a resource holds in spiritual, religious, or tribal context), existence value (the value held for the continued existence of ORW attributes and the values they support, even if they are not

[42] Bonacquist-Currin, M. 2020. The economic value of birdwatching: a meta-analysis and summary of stated preference studies. Available online at: https://ecommons.cornell.edu/bitstream/handle/1813/103338/BonacquistCurrin_cornell_0058O_11101.pdf?sequence=1

[43] Note that these are on private property on segments of the river outside the proposed ORW boundary.

[44] WA Recreation and Conservation Office, 2023. Salmon Recovery Project database. https://srp.rco.wa.gov/project/290/14508. Over $650,000 in 2015-dollars converted to current dollars using US Bureau of labor Statistics, 2023. CPI Inflation Calculator. https://www.bls.gov/data/inflation_calculator.htm.

directly used), and bequest value (the value of maintaining these resources and ORW qualities for future generations.

Both use and non-use values are difficult to quantify, as they encompass broad, complex, and interrelated values connected to history, culture, economics, spiritual beliefs, identity, and protection of these values for future generations.

4.2.2.5 Educational and scientific values

Educational and scientific values have both monetary values and non-monetary values, such as cultural appreciation and scientific knowledge growth. The proposed rule amendment would increase the educational and scientific research opportunities in ORWs. We were not able to quantify direct monetary value to educational benefits. To illustrate the value of maintaining the proposed ORWs, we look to their attributes and investments made in them:

In 2002 – 2007, the National Science Foundation awarded over $840,000 in grants to researchers to study the lake to learn about the possibility of extraplanetary life.[45] Addressing the unique nature of Soap Lake, the ORW designation applicants (Soap Lake Conservancy and Confederated Tribes of the Colville Reservation) indicated that:

- Soap Lake is an alkaline meromictic lake, with very high salinity and an exceptional mineral profile. Research by Bennet summarized various study results for Soap Lake and found 22 constituents of salts, minerals, free elements, and an unusual oil (ichthyol).[46]
- As a result of the unusual water chemistry, specialized bacteria evolved in Soap Lake and have created a unique environment worth conserving.[47] The chemocline between the upper and lower layer contains a bacterium unique to Soap Lake, named Thioalkalimicrobium microaerophilum sp. nov.;[48] and a unique bacterium of a newly described genus was isolated from driftwood in Soap Lake and named Nitrincola lacisaponensis gen. nov., sp. nov.[49]
- Soap Lake was studied by scientists at Central Washington University through National Science Foundation grants due to potential similarities with possible lakes on subsurface Mars; the lake was given a rare designation as a National Science Foundation Microbial Lab in 2002. Over 100 scientific research studies have referenced Soap Lake microbial

[45] https://www.nsf.gov/awardsearch/showAward?AWD_ID=0132158
[46] Bennett, WAG. 1962. Saline lake deposits in Washington. In Washington Division of Mines and Geology Bulletin 49
[47] Paul VG and MR Mormile. 2017. A case for the protection of saline and hypersaline environments: a microbiological perspective. FEMS Microbiology Ecology, 93.
[48] Sorokin DY, Foti M, Pinkart HC and G Muyzer. 2007. Sulfur-oxidizing bacteria in Soap Lake (Washington State), a meromictic, haloalkaline lake with an unprecedented high sulfide content. Appl. Environ. Microbiol, 73(2): 451-455
[49] Dimitriu PA, Pinkart HC, Peyton BM and MR Mormile. 2008. Spatial and temporal patterns in the microbial diversity of a meromictic soda lake. Washington State. Appl. Environ. Microbiol., 74: 4877–4888

life, algae, minerals, or its element profile; many of these references pertain to direct research conducted on the lake.[50]

4.2.2.6 State-specific regulatory protection of ORW

The proposed rule amendments would establish Washington-controlled protections for the four proposed ORWs. This would mean long-term protection of these waters and the values they hold and provide (discussed above), regardless of another regulatory context. As discussed in Chapter 3, uncertainty exists for federal rules, as they may change over time without state input and decisions, and we cannot forecast whether they might become more or less protective on their own. By designating areas of the Cascade River, Napeequa River, Green River, and Soap Lake as ORWs, the proposed amendments would mitigate external regulatory uncertainty.

A recent decision by the US Supreme Court on federal authority to regulate certain wetlands provides an example of the importance of state-level regulation in cases where the state is more protective or broader in scope. In *Sackett v Environmental Protection Agency (EPA)* – in which a property owner challenged EPA authority to require a permit, require restoration, or impose penalties for development that backfilled a wetland on their property – the Supreme Court ruling affected how federal agencies review and permit impacts on wetlands, narrowing the protections for some wetlands and streams.[51] The Court ruled that the federal Clean Water Act extends only to wetlands that have a continuous surface connection to waters of the United States (i.e., a relatively permanent body of water connected to traditional, interstate navigable waters).[52]

This ruling means that some wetlands and streams nationwide will have less federal protection than they were previously afforded if they are not protected by other regulations. However, Washington's wetlands, seasonal streams, and other waters remain protected under state law: the Water Pollution Control Act of 1945 and other state laws, as implemented through Ecology rules.[53] This means the services provided by the wetlands and streams that would otherwise lose protection are maintained, including contributions to water quality, flood protection and mitigation, and habitat for multiple species including those that are endangered or threatened.

The proposed rule amendments would mitigate the risk of similar changes in federal law, implementation, or interpretation affecting the degree to which the proposed ORWs are protected in the future, particularly because many of their baseline protections rely on federal agency requirements (see Chapter 3 for detailed discussion).

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[50] https://scholar.google.com/scholar?as_vis=0&q=%22soap+lake%22&hl=en&as_sdt=1,48

[51] Sackett et ux. v. Environmental Protection Agency et al., Certiorari to the United States Court of Appeals for the Ninth Circuit, No. 21–454. Argued October 3, 2022—Decided May 25, 2023

[52] https://www.scotusblog.com/case-files/cases/sackett-v-environmental-protection-agency/

[53] https://ecology.wa.gov/Water-Shorelines/Wetlands/Regulations/State-wetland-regulations?utm_medium=email&utm_source=govdelivery

4.2.3 Expanding tribal consultation to align with current practice, to support proposed ORW designations and statewide interest in ORW protections.

Expanding tribal consultation brings a broader inclusion of tribal interests and benefit future policy making.

4.2.4 Creating a new section listing waterbodies designated as ORWs

Adding this new section provides more information on designated waterbodies.

4.2.5 The rule amendment would also make two minor changes in Table 602

These two minor changes help to identify Cascade River and Green River are outstanding resource waters.

Chapter 5: Cost-Benefit Comparison and Conclusions

5.1 Summary of costs and benefits of the proposed rule amendments

We did not identify immediate or likely future impacts associated with the proposed rule amendments, as implementation of baseline laws and rules is likely to be protective of the proposed ORW-designated waters under likely current and future circumstances. We base this determination on current activities identified for each waterbody and surrounding lands, in conjunction with existing permitting requirements, federal and state laws and rules, and local regulations. We also identified potential development scenarios and broader trends in activities that could occur in the proposed ORW areas.

The proposed rule amendments could affect activities in unlikely or unforeseen circumstances if baseline requirements are not sufficiently protective of the outstanding qualities of the proposed ORW-designated waterbodies. Such circumstances could include:

- Activities that affect inflow or water removal from Soap Lake in a way that affects salinity and is not prevented by state and local baseline regulations and permit requirements.
- Activities that create runoff to proposed ORW-designated rivers, of substances not covered by baseline water quality or land use regulations and permit requirements, where runoff is not mitigated by actions otherwise required in permit.
- Changes to baseline requirements at the federal level, affecting management of federal lands and associated environmental protections.

Likely costs

In the exceptional circumstances listed above, the proposed rule amendments could result in a permittee being required to do additional monitoring for permitted activities.

They could also result in:

- An Ecology investigation of degradation sources under the baseline requirements and procedures to identify potential human causes.
- Technical assistance in compliance.

Based on our understanding of baseline regulations and activities, we could not confidently forecast likely and specific circumstances and quantify these costs.

Likely benefits

As discussed above, the proposed rule amendments are unlikely to affect current and foreseeable activities in the proposed ORW-designated areas, as baseline requirements are likely to be protective of ORW attributes in current and likely future circumstances. In the exceptional circumstances, with possible additional compliance requirements, discussed above,

the proposed rule amendments would generate benefits of additional protection of environmental values associated with ORWs, including incremental values of:

- Relatively pristine or exceptional quality waters and quality of withdrawals.
- Recreational values.
- Fish and wildlife values, including for endangered or threatened species and unique organisms.
- Cultural and use values for tribes.
- Educational and scientific values.

By creating state-controlled protections over and above the baseline for exceptional circumstances, the proposed rule amendments would also mitigate risk of changes to baseline requirements that are out of Washington's and Washingtonians' control. These risks include potential future administrative or court decisions that affect the level or scope of federal protections in ORW-designated areas.

5.2 Conclusion

We conclude, based on a reasonable understanding of the quantified and qualitative costs and benefits likely to arise from the proposed rule amendments, as compared to the baseline, that the benefits of the proposed rule amendments are greater than the costs.

Chapter 6: Least-Burdensome Alternative Analysis

6.1 Introduction

RCW 34.05.328(1)(c) requires Ecology to "…[d]etermine, after considering alternative versions of the rule and the analysis required under (b), (c), and (d) of this subsection, that the rule being adopted is the least burdensome alternative for those required to comply with it that will achieve the general goals and specific objectives stated under (a) of this subsection." The referenced subsections are:

(a) Clearly state in detail the general goals and specific objectives of the statute that the rule implements;

(b) Determine that the rule is needed to achieve the general goals and specific objectives stated under (a) of this subsection, and analyze alternatives to rule making and the consequences of not adopting the rule;

(c) Provide notification in the notice of proposed rulemaking under RCW 34.05.320 that a preliminary cost-benefit analysis is available. The preliminary cost-benefit analysis must fulfill the requirements of the cost-benefit analysis under (d) of this subsection. If the agency files a supplemental notice under RCW 34.05.340, the supplemental notice must include notification that a revised preliminary cost-benefit analysis is available. A final cost-benefit analysis must be available when the rule is adopted under RCW 34.05.360;

(d) Determine that the probable benefits of the rule are greater than its probable costs, taking into account both the qualitative and quantitative benefits and costs and the specific directives of the statute being implemented.

In other words, to be able to adopt the rule, we are required to determine that the contents of the rule are the least burdensome set of requirements that achieve the goals and objectives of the authorizing statute(s).

We assessed alternative proposed rule content, and determined whether they met the goals and objectives of the authorizing statute(s). Of those that would meet the goals and objectives, we determined whether those chosen for inclusion in the proposed rule amendments were the least burdensome to those required to comply with them.

6.2 Goals and objectives of the authorizing statute

The authorizing statute for this rule is Chapter 90.48 RCW, Water Pollution Control. Its goals and objectives include the state of Washington's policy of maintaining the highest possible standards to ensure the purity of all waters of the state consistent with public health, public enjoyment, the protection of wildlife, and the industrial development of the state. This requires the use of all known available and reasonable methods to prevent and control the pollution of the waters of the state of Washington.

RCW 90.48.035, Rule-making authority, specifically authorizes Ecology to promulgate, amend, or rescind rules and regulations as deemed necessary to maintain the highest possible standards of all waters in the state. Its goals and objectives include but are not limited to rules relating to standards of quality of waters of the state and regulating substances discharged into them.

6.3 Alternatives considered and why they were excluded

We considered the following alternative rule content and did not include it in the proposed rule amendments for the reasons discussed in the subsection below.

- Not designating the Cascade River as an Outstanding Resource Water.

6.3.1 Not designating the Cascade River as an Outstanding Resource Water

During the rule development, it was suggested that an Outstanding Resource Water designation for the Cascade River may be redundant in light of the existing wilderness protections in Glacier Peak Wilderness Area and North Cascades National Park. This alternative would not have met the goals and objectives of the statute because Ecology determined that there was sufficient information for the Cascade River to be eligible for consideration as an ORW, maintaining the highest possible standards to ensure the purity of the waterbody. Ecology determined that while federal wilderness designations can offer protection for the River, an ORW designation provides the opportunity for Ecology to protect the exceptional values of the River and tributaries in a State rule. This action would create more resilient protection for the waterbody against potential federal land designation changes.

6.4 Conclusion

After considering alternatives to the proposed rule's contents, within the context of the goals and objectives of the authorizing statute, we determined that the proposed rule represents the least-burdensome alternative of possible rule contents meeting the goals and objectives.

Chapter 7: Regulatory Fairness Act Compliance

The Regulatory Fairness Act (RFA; RCW 19.85.070) requires Ecology to perform a set of analyses and make certain determinations regarding the proposed rule amendments. We assessed the compliance costs of the proposed rule amendments (see Chapter 3) and did not identify any necessary changes in compliance behavior by any identified business. We determined that Ecology is exempt from performing additional analyses under RCW 19.85.025(4), which states, "This chapter does not apply to the adoption of a rule if an agency is able to demonstrate that the proposed rule does not affect small businesses." Similarly, the proposed rule amendments do not meet the criteria for the requirement to prepare a Small Business Economic Impact Statement under RCW 19.85.030(1)(a), which states, "In the adoption of a rule under chapter 34.05 RCW, an agency shall prepare a small business economic impact statement: (i) If the proposed rule will impose more than minor costs on businesses in an industry."

We examined the set of landowners around the proposed ORW-designated waterbodies, including nine business locations.[54, 55] We also identified a special permit holder for annual hydroplane races on Soap Lake.[56] As these businesses have not been identified as affecting current qualities of the proposed ORWs, we do not expect their activities to be impacted by the proposed rule amendments.[57] We expect any likely future business expansion or development to be regulated by baseline laws and rules, and similarly not incur additional compliance costs under the proposed rule amendments. The amendments would protect the exceptional qualities of the for proposed ORWs largely in cases of unexpected developments or changes to the regulatory baseline.

[54] Grant County, 2023. TerraScan Mapsifter. https://grantwa-mapsifter.publicaccessnow.com/defaultHTML5.aspx
[55] RFA requirements do not apply to government entities or private parties.
[56] WA Department of Ecology, 2023. Proposed Outstanding Resource Waters Designations for Soap Lake and Portions of the Cascade, Napeequa, and Green Rivers. Technical Support Document. July 2023.
[57] We note that the WA Department of Natural Resources cannot prohibit public trust activities (including boating) as the authorizing authority for access to Soap Lake, but can place conditions on the activity (e.g., placement of buoys).

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Internal peer review: Review by staff internal to the Department of Ecology

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External peer review: Review by persons that are external to and selected by the Department of Ecology

n/a

Open review: Documented open public review process that is not limited to invited organizations or individuals

n/a

Legal and policy document: Documents related to the legal framework for the significant agency action including but not limited to federal and state statutes, court and hearing board decisions, federal and state administrative rules and regulations, and policy and regulatory documents adopted by local governments

33 U.S.C. §§1251-1387, Federal Water Pollution Control Act.

40 CFR 131.20, Water Quality Standards – State review and Revision of water quality standards.

40 CFR 131.12, Antidegradation policy and implementation methods.

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Chapter 90.48 RCW, Water Pollution Control.

Chapter 173-201A WAC, Water Quality Standards for Surface Waters of the State of Washington.

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US Forest Service, 2023. Regional Ecosystem Office. Northwest Forest Plan. Land Use Allocations. https://www.fs.usda.gov/r6/reo/landuse/

US Forest Service, n.d. What are the definitions of inventories roadless areas, potential wilderness areas, recommended wilderness areas and designated Wilderness? https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fsbdev3_000250.pdf

US Forest Service and US National Parks Service regulations and designations, including but not limited to:

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- Glacier Peak Wilderness Area.
- Okanogan-Wenatchee National Forest.
- Mount St. Helens National Volcanic Monument.
- Gifford Pinchot National Forest.

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Records of the best professional judgment of Department of Ecology employees or other individuals

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Appendix A: Administrative Procedure Act (RCW 34.05.328) Determinations

A. RCW 34.05.328(1)(a) – Clearly state in detail the general goals and specific objectives of the statute that this rule implements.

See Chapter 6.

B. RCW 34.05.328(1)(b) –

1. Determine that the rule is needed to achieve the general goals and specific objectives of the statute.

See chapters 1 and 2.

2. Analyze alternatives to rulemaking and the consequences of not adopting this rule.

A rulemaking is the only way to adopt an ORW designation. If we don't adopt the designations, we would not be placing extra protections on the highest quality waterbodies that are nominated. As a consequence, the antidegradation review of future proposed actions would be limited to only those required in Tier I and Tier II of the water quality standards. For example, a new proposed discharge could be permitted if it were to meet less restrictive Tier II antidegradation requirements.

Please see the Least Burdensome Alternative Analysis, Chapter 6 of this document, for discussion of alternative rule content considered.

C. RCW 34.05.328(1)(c) - A preliminary cost-benefit analysis was made available.

When filing a rule proposal (CR-102) under RCW 34.05.320, Ecology provides notice that a preliminary cost-benefit analysis is available. At adoption (CR-103 filing) under RCW 34.05.360, Ecology provides notice of the availability of the final cost-benefit analysis.

D. RCW 34.05.328(1)(d) – Determine that probable benefits of this rule are greater than its probable costs, taking into account both the qualitative and quantitative benefits and costs and the specific directives of the statute being implemented.

See Chapters 1 – 5.

E. RCW 34.05.328 (1)(e) - Determine, after considering alternative versions of the analysis required under RCW 34.05.328 (b), (c) and (d) that the rule being adopted is the least burdensome alternative for those required to comply with it that will achieve the general goals and specific objectives stated in Chapter 6.

Please see Chapter 6.

F. RCW 34.05.328(1)(f) - Determine that the rule does not require those to whom it applies to take an action that violates requirements of another federal or state law.

Under the Federal Clean Water Act, states are required to develop and adopt a statewide antidegradation policy consistent with the Code of Federal Regulations at § 131.12. These

regulations require that such a policy should, at minimum, be consistent with the following provision for protecting outstanding resource waters (131.12(a)(3):

"Where high quality waters constitute an outstanding national resource, such as waters of National and State parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected."

Ecology updated our antidegradation policy in 2003 to be consistent with the federal requirements to protect outstanding resource waters. Any adopted designations are reviewed and approved by the EPA before becoming effective for Clean Water Act actions.

G. RCW 34.05.328 (1)(g) - Determine that the rule does not impose more stringent performance requirements on private entities than on public entities unless required to do so by federal or state law.

No, this rule does not impose more stringent performance requirements on private entities than on public entities. Any entity, whether public or private, must adhere to the rules protecting water quality in the state of Washington.

H. RCW 34.05.328 (1)(h) Determine if the rule differs from any federal regulation or statute applicable to the same activity or subject matter.

No.

If **yes**, the difference is justified because of the following:

☐ (i) A state statute explicitly allows Ecology to differ from federal standards. [If checked, provide the citation included quote of the language.]

☐ (ii) Substantial evidence that the difference is necessary to achieve the general goals and specific objectives stated in Chapter 6.

[If checked, explain.]

I. RCW 34.05.328 (1)(i) – Coordinate the rule, to the maximum extent practicable, with other federal, state, and local laws applicable to the same subject matter.

We will work with EPA to ensure that the proposed designations are approvable. We will also continue to work with federal land managers to understand how the potential rule could impact land use on federal lands and local jurisdictions to help understand how the potential rule could impact land use decisions adjacent to the proposed outstanding resource waters.